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UNIVERSITY OF TORONTO
DEPARTMENT GEOGRAPHY

NEWFOUNDLAND GOVERNMENT

UNITED STATES OF AMERICA

FISHERY MARKET SURVEY

DECEMBER 1937

By

J. MAURICE, M. I. Ex.

for the

NEWFOUNDLAND FISHERIES BOARD

DEPARTMENT OF NATURAL RESOURCES

ECONOMIC BULLETIN NO. 5

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United States Of America

Fishery Market

Survey

New York, N. Y.
December 31st,
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REPORT

PART I

THE NEWFOUNDLAND FISHERIES

1. The assumption that appreciable quantities of the species of fish described below exist in close vicinity of the Newfoundland coast is based upon the Annual Report of the Fishery Research Laboratory, Volume II, No. 5, for the year 1935 and dated June 1936, issued by Dr. H. Thompson, D.Sc., M.A., Director, from which the following paragraphs are cited:—

> "It is sometimes stated that Newfoundland's fishery resources are virtually limitless and that, over and above cod, many other species of fish should be utilized. There is a deal of truth in this statement. The material exists to provide an income far in advance of that normally extracted from the fisheries, assuming always that certain difficulties could be overcome."
>
> "It is no exaggeration to say that, if proper connections can be made, Newfoundland can derive from the haddock, which lie well within a day's steaming from her south eastern harbours, an income equivalent to that yielded at present from cod."

2. The report further states that the rough "dab" termed 'American Plaice' in Canada is more plentiful than cod in certain localities. Other flat fish—the halibut and witch, although not really plentiful in Newfoundland waters, can be caught. The report goes on to cite "smooth dabs", "monkfish", and "silver hake", and fair numbers of "skate."

3. Reading further from the report of the Fishery Research Laboratory, it can be gathered that the real development of the deep sea fisheries is dependent upon regular landings of deep sea fish, which can only be achieved by the employment of trawlers.

4. Referring to the inshore fisheries of Newfoundland the report cites the varying conditions which affect the codfishery, but emphasizes the distinct element of uncertainty as to whether fish will run in any one place and the drawbacks due to the highly seasonal nature of the run of fish.

5. The report also refers to the Salmon, Herring, Lobster, Smelt, and Scallops species, all valuable to a proper and systematic development of the Newfoundland fisheries.

6. It is to be assumed, therefore, that with the adoption of adequate and proper methods of fishing for the two fisheries:

(a) Inshore

(b) Deep Sea

producers should be able to obtain regular landings that will provide for production on a sufficient scale to cater to receptive markets.

7. The species of fish in the classes referred to, are:—

(a) Cod, Haddock, Hake, Pollock, and Cusk
(b) Halibut
(c) Mackerel
(d) Salmon
(e) Herring
(f) Smelts
(g) Shellfish (Lobsters, Scallops, Clams)

all of which are shown to be of importance to Newfoundland and are imported by the United States of America as well as many other markets of the world.

8. There are in addition other fishes of commercial importance which are known to exist off the coast of Newfoundland. These are:—

(a) Flounders, i.e., American Plaice, Grey Sole, etc.
(b) Whiting
(c) Swordfish
(d) Tuna Fish

all of which are species largely used in the United States market.

PART II

THE UNITED STATES DOMESTIC FISHERY

General

9. Recently compiled statistics show that the annual catch of all fish by United States owned vessels has averaged between two and a half billion and three billion pounds annually.

10. The catches are classified as being:—

(1) From international waters.... ....45 per cent
(2) From national waters, national rivers and the Great Lakes.... ....55 per cent

11. The United States Domestic Fishery operations are largely off the east and west coasts of U. S. A. and Canada but extend to the Bering Sea, to Hawaii, the Phillipine Islands, Galapagos Islands, to the Grand Banks, to West Indies and Mexico. A small United States Domestic Fishery is also conducted on the "Treaty Coasts" of Canada and Newfoundland, under the terms of the Treaty of 1818 with Great Britain.

12. In regard to the Treaty of 1818 it would seem valuable to quote the terms of the Treaty and the following regulations issued by the Department of the Treasury of the United States as to what, in their view, constitutes an American Fishery.

TREATY GREAT BRITAIN AND UNITED STATES

1818, October 20, Convention Between United States and His Britannic Majesty

ARTICLE 1

13. Whereas differences have arisen respecting the liberty, claimed by the United States for the inhabitants thereof, to take, dry, and cure fish on certain coasts, bays, harbours, and creeks of His Britannic Majesty's dominions in America, it is agreed between the high contracting parties that the inhabitants of the said United States shall have, for ever, in common with the subjects of His Britannic Majesty, the liberty to take fish of every kind on that part of the southern coast of Newfoundland which extends from Cape Ray to the Ramea Islands, on the western and northern coast of Newfoundland; from the said Cape Ray to the Quirpon Islands; on the shores of the Magdalen Islands; and also on the coasts, bays, harbours, and creeks, from Mount Joli, on the southern coast of Labrador, to and through the Straits of Belle Isle, and thence northwardly, indefinitely, along the coast without prejudice, however, to any of the exclusive rights of the Hudson's Bay Company; and that the American fishermen shall also have liberty, for ever, to dry and cure fish in any of the unsettled bays, harbours, and creeks of the southern part of the coast of Newfoundland, hereabove described, and of the coast of Labrador; but as soon as the same, or any portion thereof, shall be settled, it shall not be lawful for the said fishermen to dry or cure fish at such portion so settled, without previous agreement for such purpose with the inhabitants, proprietors, or possessors of the ground. And the United States hereby renounce, for ever, any liberty heretofore enjoyed or claimed by the inhabitants thereof to take, dry or cure fish on or within three marine miles of any of the coasts, bays, creeks, or harbours of His Britannic Majesty's dominions in America, not included within the above-mentioned limits: *Provided, however*, that the American fishermen shall be admitted to enter such bays or harbours for the purpose of shelter and of repairing damages therein, of purchasing wood, and of obtaining water, and for no other purpose whatever. But they shall be under such restrictions as may be necessary to prevent their taking, drying, or curing fish therein, or in any other manner whatever abusing the privileges hereby reserved to them.

UNITED STATES TREASURY INTERPRETATION OF TREATY

UNITED STATES TREASURY DEPARTMENT

CUSTOMS REGULATIONS, AUGUST 20th, 1937

14. *Art. 489. Free entry authorized—Definition.*

Tariff Act of 1930, paragraph 1730 (a) (free list):—

All products of American fisheries (including fish, shellfish, and other marine animals, and spermaceti, whale, fish, and other marine animal oils),

which have not been landed in a foreign country or which, if so landed, have been landed solely for trans-shipment without change in condition: Provided, That fish the product of American fisheries (except cod, haddock, hake, pollock, cusk, mackeral, and swordfish) landed in a foreign country and there not further advanced than beheaded, eviscerated, packed in ice, frozen, and with fins removed, shall be exempt from duty: Provided further, That products of American fisheries, prepared or preserved by an American fishery on the treaty coasts of Newfoundland, Magdalen Islands, and Labrador, as such coasts are defined in the Convention of 1818 between the United States and Great Britain, shall be exempt from duty.

(b) Fish or other marine products taken in American waters or on the high seas by American vessels or by residents of the United States, whether Americans or aliens, in undocumented vessels and brought into port by the vessel taking the same are not imported from a foreign port, and no entry therefor is required.

(c) American fishery within the meaning of said paragraph is defined as a fishery operated under the American flag by American vessels in foreign waters, in which such vessels have the right, by treaty or otherwise, to take fish and other marine products.

(d) The employment of foreign fishermen either as members of the crew or under the supervision of the master or crew of an American vessel is allowed. The purchase by the owner, agent, master, or crew of an American vessel of fish or other marine products taken by the citizens of another country in foreign waters will subject such fish or other marine products to treatment as foreign merchandise.

(e) The products of American fisheries may include bone, sponges, turtles, pearls, and all other marine products.

(f) Marine products taken by American vessels will be entitled to free entry, although prepared, preserved, or otherwise changed in condition on board an American vessel, provided the work is done by the master and crew of such vessel, or by persons employed by them for the purpose.

15. *Art. 490. Affidavit—Manifest.*

(a) When such products are imported by the taking vessel, or are shipped to the United States by the master, owner, or agent of the taking vessel or vessels, otherwise than in the taking vessel, an affidavit (customs Form 3295) by the master of the taking vessel, verified by at least two members of the crew, will be required in connection with the entry. Additional proof may be required if doubt exists. In the case of trans-shipment there should be required an additional statement as to what, if any, change has been made in the condition of the fish since their taking and where such change occurred.

(b) If fish or other products are shipped to the United States by a firm in a foreign country which has purchased them from the master, owner, or agent of the taking vessel, the declaration on customs Form 5295 should be executed by the master and two members of the crew of the American fishing vessel for the entire quantity discharged at the foreign port, and kept on file by the American consul having jurisdiction of that port, or by the principal

United States customs officer stationed there, if any, if there is no American consul at the port. In such cases there should be filed in connection with the entry a declaration of the purchasing firm or its agent which shall be certified by the consul, or a United States customs officer authorized to administer oaths, at the port where the declaration (Form 3295), above required, is on file. Such declaration of the purchasing firm or agent shall be in the following form:—

I, ————————, agent of the ————————, at the port of ————————, do hereby declare under oath that ———————— did receive from the following named American fishing vessels ———————— pounds of ———————— and ———————— pounds of ———————— and that ———————— pounds thereof in ———————— cases went forward in ———————— consigned to ———————— at ————————,
(carrier)

and that the above products have not been changed in condition after taking, except as shown below:—

Vessel and Registry	Article	Pounds Received	Date Received	Pounds Shipped	No. of Cases	Nature and change in condition if any, and place where so changed (see Note)

————————————
Agent for

Sworn to before me this————————day of————————, 19—.

I further certify that the affidavit of the master and two members of the crew of each of the vessels scheduled above, dated as therein shown, covering products of American fisheries and stating such of the above facts as are within their knowledge is on file at this office, and that to the best of my

knowledge and belief the merchandise referred to in the attached invoice is a part of that covered by the said affidavits.

_____

_____

(Title)

Note:—Name of country or, if on board vessel, name and registry of vessel.

(c) Where entry is to be made at a port in the United States without inspection at the port of first arrival in accordance with section 463 of the tariff act, the shipment should, in addition to the above requiremens, be accompanied by an inward foreign manifest.

POLITICAL

16. On the High Seas, the fishery is of course *international* and is available to fishermen of all nations.

17. The supplies of fish in *territorial* waters, and inland waters, are, until captured, the property of the State or Federal Government.

18. The value of the United States Domestic Fresh Water Fishery is highly important in relation to the trade as a whole and its rights are very carefully guarded as it represents a part of the resources of the State concerned.

The individual States reserve to themselves the right of enforcing restrictions on imports of fish to the extent of almost prohibiting entry into their particular States.

The individual States also jealously guard their particular participation in the industry as a whole and a typical case was the decision regarding "Ocean Perch." This fish is better known as 'Bream' but the trade considered this name not conducive towards attaining large consumer sales. Searching records it was found that Bream was related to Perch and therefore the name "Ocean Perch" was adopted. The trade dealing with production of Lake Perch contested this and filed strenuous complaints supported by the State governments interested, but the Boston merchants were able to sustain their case by reference to the records which traced the relationship of Bream to Perch.

ECONOMIC

19. The United States Domestic fisheries give employment to approximately:—

126,000 fishermen, divided
31,000 on vessels
95,000 on boats and shore

75,000 vessels, divided
165 steam vessels 12,860 tons net
4,070 motor vessels 75,275 tons net
170 sail vessels 4,190 tons net
31,840 motor boats
39,200 row boats and accessory boats

20. It is stated that two thirds of the men are employed in the "Finny" fisheries and one third in the shell fisheries.

21. The catch given at 2½ to 3 billion pounds is really an understatement of the quantity caught as a number of fish are thrown back into the sea and in some cases species of fish caught may have no commercial value. Statisticians calculate that the discarded quantity of fish for the industry as a whole averages approximately 15 per cent of the value of the total marketable catch.

22. In quantity of catch the species take the following order:—

Pilchards
Salmon
Menhaden
Sea Herring
Haddock
Mackerel
Cod
Tuna
Flounder

But in value to the fishermen, the species assume the following order:—

Salmon
Tuna
Haddock
Cod
Flounder
Mackerel
Lake Trout
Catfish
Sea Herring
Shad

and these species constitute approximately three fourths of the value of the total domestic United States catch averaging between 70 and 80 million dollars annually.

PREPARATION AND ABSORPTION

23. The utilization of the catch can be divided into two classes:—

(a) Fresh and Frozen
(b) Processed, i.e., Canned
Salted
Smoked
Rendered

24. In terms of quantity, 28 per cent of the United States domestic catch goes to the fresh market either packed in ice for immediate use, or frozen for subsequent consumption. This quantity represents 54 per cent in terms of value.

25. The remaining 72 per cent in quantity and 46 per cent in value is used by the various processing industries.

26. In the (a) class of Fresh and Frozen fish, freezing is usually resorted to as a means of preserving fish in their natural condition during the summer when supplies are large, for offering for sale during the winter. In all statistics given later on in this survey, frozen fish is classified with fresh fish since, in the majority of cases, it is sold to the consumer as fresh fish.

27. In the (b) class, in the order of weight of fish used, the following are the chief processing industries:—

Rendering
Canning
Salting
Smoking

28. For rendering, about one billion pounds of fish, mostly pilchards, sea herring, and menhaden, are used to make meal, chiefly for poultry feeding, and oil for soap making.

29. For canning there is in order of importance:—

Salmon—located principally in Alasaka.
Pilchard, Tuna and Mackerel in California.
Sea Herring in Maine.

30. The canning industry requires fish of a very high quality but because of location of catches, small demand and little competition from the fresh and frozen market, the buying seasons and species used, the price paid by the canning industry is usually lower than the average price on the fresh market.

31. Salting in the processed class (b) is confined principally in order of importance to:—

Salmon
Cod
Sea Herring

32. Mild cured salmon, the chief salted salmon product, is almost exclusively confined to the Pacific salmon.

33. Cod salting is done at sea off Alaska and on the New England coast, but to a great extent the salting of cod on the New England coast is governed by the quantities of fresh fish available for the fresh markets.

34. Scotch cured herring, the main salted herring product, is largely prepared in Alaska.

35. Finally, smoking in this class (b) takes up a substantial part of the United States domestic catch. The major portion of this quantity is pre-

pared in the large consuming centres from frozen or salted fish. This practice appears to be definitely dictated by the fact that the smoked product is highly perishable, and therefore must be distributed promptly and go into almost immediate consumption.

36. In order of importance the fish used for smoking can be classifed as follows:—

(a) Whitefish (hake, or fresh water fish).
(b) Cod—in forms of fillet.
(c) Haddock—in forms of fillet.
(d) Salmon—prepared from the mild cured product.
(e) Sea Herring—prepared almost entirely from imported fresh and frozen fish. One of the principal final products consisting of small boneless strips of salted fish heavily smoked.

MARKETING OF THE DOMESTIC PRODUCTION

37. Practically speaking almost the entire domestic production is marketed in the United States. In fact, only two products are exported in volume quantities, i.e:

Canned Salmon
Canned Pilchards

38. To the fresh fish trade rapid consumption is of paramount importance and thus in line with this policy there is little, if any, speculation in futures.

39. The generally accepted practice in all the principal fish markets is that for the most part the catch is sent on consignment to commission houses in the major consuming areas. This practice is, however, undergoing a gradual change as the commission houses now guarantee to return a definite price to the shipper less, of course, the usual commission. This commission varies from 3 per cent to 12½ per cent, according to the species of fish and the market shipped to.

40. The general method of shipping on consignment to the markets has many critics for the results returned to the coastal dealers fluctuate very widely. This fluctuation, together with the uncertainty of the daily landings at the fishing port, in its turn seriously affects the auction bids for the catches landed.

41. A further influence on the auction bids is the volume of fresh fish imports, since a large portion of these imports is shipped to the United States market on consignment.

42. One of the main features having a decided bearing on the marketing activities in almost all branches of the fishery is the custom and observance of religious principles, for large sales are made during periods when Roman Catholics abstain from eating meat, and when Jews, both in accordance with ancient custom and marked partiality for this food, eat larger quantities of fish.

43. Insofar as fresh fish is concerned the growth of the demand has caused very rapid change and development, and this has brought about increased demand for frozen fish of all descriptions. This development has found its main centres in the fishing ports, but at the same time has attracted imports on a greatly increased scale.

44. Co-related to this development of very recent years, is the wider geographical distribution of fresh and frozen fish, the modern methods of packing, the improved transportation and the refrigeration facilities provided in all the large consuming centres.

45. The result of this development has, as can be appreciated, transformed what might be termed seasonal fishing into almost a continuous operation, and has gone a very long way to reduce the loss on fishing frequently occasioned by the older methods of marketing.

46. The marketing of the domestic production of canned fish can, with few exceptions, be stated as being based upon volume distribution at low prices.

47. The most important canned products which find a market in the higher price range are:—

Tuna.
Salmon (best grades)
Codfish cakes.

48. The other canned packs which include California pilchards and Maine herring (both sold as sardines) the cheaper Alaskan salmon, and the Californian mackerel are all put up on a mass production scale, to meet the demand for a low price concentrated food.

PART III

DETAILED INFORMATION OF THE VARIOUS SPECIES

49. Whilst perhaps much of the following information may be known to operators in the fishing industries, it would seem to be important that in regard to the species enumerated in paragraph 7 an exact and detailed summary covering:—

Rates of Duty

General Description and Uses

Production

Imports Into the United States

Exports from the United States

should be given. This information will provide possible participants into the United States Trade with a definite basis upon which to commence their study of whatever section of the trade they may consider entering into.

COD HADDOCK HAKE POLLOCK CUSK

50. RATES OF DUTY:—

Fresh or Frozen—		
Whole, beheaded, eviscerated or both	1c.	per lb.
Fillet, skinned, boned or divided, etc.	2½c.	per lb.
Dried and Unsalted	2½c.	per lb.
Pickled or Salted:—		
Whole, etc.		
Dry Salted (containing not more than 43% moisture)	1¼c.	per lb.
Green Salted (containing more than 43% moisture)	¾c.	per lb.
Skinned and Boned	2c.	per lb.
Smoked or Kippered—		
Whole, etc.	2½c.	per lb.
Filleted, Skinned, etc.	3c.	per lb.

Description And Uses

51. *General.* Cod, Haddock, Hake, Pollock, and Cusk are often referred to as Cod and related species, and are commercially known as "ground fish." Most fishing vessels take all five species but on the whole the majority can be said to specialize in cod and/or haddock. When sold in the fresh or frozen state each species is, to a generally large degree, marketed as a distinct product. When salted or canned, most of them are marketed as cod. Smoked cod fillets and smoked haddock fillets are marketed under their respective names, whilst split smoked haddock is sold as Finnan Haddie.

52. In the world supply, cod is by far the most important of the species, representing, according to published statistics, approximately three fourths of the ground fish caught annually.

53. As regards the imports of this species into the United States, cod ranks first, but when considering the United States domestic catch, cod landings take second place to haddock landings.

54. When the movements of international trade in fish are considered, salted cod and dried unsalted cod are the two most important products, although perhaps consumption of the two together does not exceed the consumption of fresh cod for immediate table use.

55. Smoked cod and related species, especially smoked fillets and the well known finnan haddie, are consumed in very considerable quantities but are too perishable to enter into international trade very extensively.

56. In regard to canning, irrespective of the enormous catch of cod and its related species, very little of the fish is used for this purpose. The reason may be found in the fact that the flesh is of a somewhat dry nature, most of the oil being concentrated in the livers which, being a valuable source of vitamins, find an industry in themselves in the production of cod oil and liver oil. The skins of the cod and its related species are used for the making of high grade glue.

Fresh and Frozen

57. Cod and its related species, as landed at the various ports, are generally classified as fresh fish irrespective of subsequent use.

58. The fresh and frozen fish trade, however, market them as

(a) Whole dressed fish
(b) Fillets

59. In the preparation for sale as whole dressed, the fish are beheaded and eviscerated, and for fillets the head, entrails, and fins are removed and the flesh is cut from the sides of the fish. Haddock and cod are predominant among the species used.

60. One hundred pounds of fresh round fish generally yields about forty pounds of unskinned fillets and about thirty-six pounds of skinned fillets.

Dried and Unsalted

61. The dried and unsalted product is prepared principally from cod. It is usually sold as stock fish. In preparing stock fish the fresh fish are beheaded, eviscerated, and exposed to the sun and wind until absolutely dry. When the backbone is removed and the fish split, it is known as split stock fish.

Salted

62. In the United States there are three salted products manufactured from cod and its related species. They are:—

1. Green or wet salted fish.
2. Dry salted fish.
3. Boneless fish.

63. Green salted fish is prepared by removing the head, guts, and two thirds of the backbone of the fresh fish and then, heavy salting. Actually green salted fish is the intermediate product for the two principal salted products, i.e., dried salted, and boneless. Nevertheless, there is some green salted fish consumed directly without further processing, but this is small as regards the United States of America.

64. Dried salted fish is prepared by drying the green salted to reduce the moisture content. When properly stored, this product will keep for long periods.

65. Boneless fish is prepared from green salted fish by removing the large bones and the skin and fins. The better grades of boneless fish are advanced to the "absolutely boneless" stage by removing the small rib and fin bones. There are other grades of boneless known as "middles" and "bricks." Boneless fish is marketed as such and in addition, is used in the manufacture of canned cod fish cakes.

66. From a hundred pounds of round fresh fish as they come from the water, about sixty-seven pounds of split fish, i.e., cleaned ready for salting, are produced. This quantity will prduce about forty-two pounds of green salted, which in turn will yield about thirty-two pounds of dry salted, or thirty-two pounds of "boneless," or twenty-five pounds of "absolutely boneless" fish.

67. From information received it is learnt that some time ago various samples of cod were submitted to the United States Food and Drug Administration for examination and were found to contain the following proportions of moisture by weight:—

Green salted	59.	per cent
Boneless	53.	per cent
Dry salted	26.8	per cent

Smoked or Kippered

68. Smoked or kippered cod, and related species, consist mostly of finnan haddie and smoked fillets of various species. Finnan haddie is haddock, beheaded, split down the belly, eviscerated, salted for a short time in strong brine and then smoked. The smoking time is given as approximately fourteen hours but this is more or less determined by atmospheric conditions.

69. Being highly perishable finnan haddie must be kept in cold storage unless sold for immediate consumption. About a hundred pounds of whole fresh haddock will produce fifty pounds of finnan haddie.

70. Other smoked fillets are prepared along the same lines as smoked fish generally is, but it should be noted that when intended for distant markets all smoked fish should be kept in cold storage or frozen.

Canned

71. In the United States of America the bulk of production of canned cod and its related species consists of fish cakes, balls and puddings made with a cooked mixture of cod or haddock, potatoes and salt. There is also a quantity of canned fish flakes produced, the principal fish used being haddock, and consists solely, therefore, of boneless cooked fish. A certain amount of canned fish chowder is also produced and this is made from a mixture of fish, potatoes, onion, and other seasoning. The foreign products entering into the United States are principally fish balls and fish puddings, consisting of a mixture of haddock, milk, potatoes, flour, nutmeg, and salt, cooked in a bouillon prepared from fish bones.

The Catch

72. Cod and its related species are essentially cold water fish preferring water of a temperature ranging from thirty-five to forty-five degrees. The species are found in the North Atlantic and in the Pacific off the shores of

Alaska and the Bering Sea. Essentially deep water fish, they are found in international waters where the fishery is open to all countries. In commercial importance, the cod fisheries rank second to the herring fisheries.

73. Statistics concerning the catch show that there is a total annual world production of about four and a half billion pounds. Of this total statistics show that about 74.9 per cent is cod, 14.8 per cent haddock, 5.6 per cent hake, 4.2 per cent pollock, and 0.5 per cent cusk. Of the world production, the following is given as the approximate distribution amongst the producing countries:—

1.	United Kingdom	26.1%
2.	Norway	12.3%
3.	Newfoundland	9.9%
4.	Germany	7.9%
5.	United States	7.7%
6.	Japan	7.5%
7.	Other Countries	28.6%

74. In world production the following points are to be noted:—

(a) In Newfoundland, Iceland, and Norway the cod fishery is an international industry. Local consumption is small and the bulk of the catch is preserved and marketed as salt cod fish.

(b) In Japan more than half the catch is dried or dry salted and consumed principally in Oriental countries.

(c) In Canada about 5 per cent is marketed fresh or frozen, about 12 per cent is marketed as fresh fillets, and 8 per cent as finnan haddie and smoked fillets. The remaining percentage of the Canadian catch is salted for the export trade, of which the United States is a principal market.

(d) In most European countries there is a ready demand for fresh fish and statistics point that only about 35 per cent is used for salting and smoking with relatively small quantities canned or dried.

(e) The United States fishery for cod and related species is operated principally for the fresh fish market. Approxmiately 35 per cent is marketed as fresh and frozen dressed fish, and 50 per cent used in the preparation of fresh frozen fillets. About 10 per cent of the total catch is salted and the remaining 5 per cent used in the manufacture of finnan haddie. smoked fillets, canned fish flakes, and cod fish cake material.

Fresh and Frozen Fillets

75. Fillets, steaks, and sticks of fresh and frozen cod and related species have for many years been prepared by retail dealers in the United States, but preparation on a large scale at the fishing ports did not begin until about 1921. In that year approximately 50,000 pounds of cod and haddock fillets were prepared. This type of production has since developed very rapidly in the United States and Canada, and to some extent in other coun-

tries, but in the United States about half the total catch of round fish is used for this production.

76. Data with respect to the production of fillets for 1934 show that the United States industries produced 59,000,000 pounds and Canadian industries 10,000,000 pounds, whereas statistics available for 1936 show that the United States industries produced 121,500,000 pounds of fresh and frozen filltes. Of this quantity it can be said they are divided in the following percentages: 60 per cent haddock, 29 per cent cod, and 11 per cent other related species.

Dried and Unsalted

77. The dried unsaled cod industry finds its home principally in Norway.

78. In the United States suitable climatic conditions are only found in Alaska, but the bulk of the Alaskan catch is used in the manufacture of salted fish. Domestic production of dried unsalted cod in 1934 was only 23,400 pounds.

79. Production in Japan is substantial but the production is sold almost entirely in the Oriental countries.

Pickled or Salted

80. Statistics available show that the world production of salted cod and related species is approximately 554,000,000 pounds, of which 96 per cent is cod and 4 per cent related species. In Iceland, Newfoundland, Norway, Denmark, and Canada the cod fishery can be considered as a national industry, and this is emphasized in the terms of percentages relating to division of the approximate world production cited above.

1. Iceland.... 25.7%
2. Newfoundland.... 24.1%
3. Norway.... 13.5%
4. Canada.... 11.0%
5. Denmark.... 8.6%
6. United States.... 4.0%
7. Other Countries.... 13.1%

81. Referring especially to the United States domestic fishery, the market for fresh cod and related species is large and takes about 85% of the catch, whilst less than 10% is taken by the salting industry. The bulk of the United States domestic consumption of salted cod is, therefore, imported.

Smoked or Kippered

82. Because of the perishable nature of the products, production in such countries as Norway, Denmark, France, the United Kingdom and Sweden probably find their largest sale for home consumption and, therefore, export

a very small quantity. It can, therefore, be concluded that trade in these products must be confined largely to interchange between neighbouring countries. In the case of the United States of America imports are practically all from Canada.

Canned

83. In the United States, production is almost confined entirely to cod fish balls, cod fish cake material, and haddock flakes. There is a very small domestic production of canned cod roe. It can, however, be said that as regards all producing countries, canning is a very small part of the industry.

Meal and Oil

84. The so-called "White" fish meal is manufactured entirely from processing the waste of cod and related species and, in the United States, the chief source of supply is the fillet waste.

85. Cod liver oil is obtained from the livers of all species of ground fish, the better grades being used for medicinal purposes and the lower grades for dressing leather, etc. In general statistics of the production of cod liver oil available from countries known as producers of the cod and related species show that:—

1. Norway supplies 77%
2. Newfoundland supplies 8%
3. Other countries supply 15%

Imports Into the United States

86. *Introduction*: In terms of whole fish imports, into the United States of America for cod and related species there were approximately:—

In 1931 ..... 140,000,000 pounds
In 1935 ..... 147,000,000 pounds
In 1936 ..... 197,000,000 pounds

equal to about 40% of the domestic catch and about 30% of the domestic consumption.

Import Percentages

87. Of the total value of imports in 1931, 1935 and 1936, the following countries contributed:—

	1931	1935	1936
Canada	68%	64%	70.0%
Newfoundland	17%	22%	20.0%
Norway	10%	10%	3.3%
United Kingdom	2%	1%	1.0%
Japan	1%	1%	3.2%
Other Countries	2%	2%	2.5%

Fresh and Frozen

88. Imports of fresh and frozen cod and related species into the United States come almost entirely from the east coast of Canada and consist chiefly of two distinct products, viz., dressed fish and fillets.

89. Imports of dressed fish, beheaded and eviscerated, in 1936 amounted to 3,439,552 pounds or about 3 per cent in value of the total imports of cod and related species. From information received none of this imported fish was further processed in the United States. This type of fish is dutiable at 1c. per pound.

90. Imports of fresh and frozen fillets of cod and related species totalled in 1936, 9,255,000 pounds, more than double the imports of the previous year at a total of 4,100,000 pounds. Of these imports Canada supplied the major part, i.e., 8,468,000 pounds in 1936 and 4,012,000 pounds in 1935. The reason for these larger imports is stated to have been the result of increased prices obtainable in the United States. This type of fish is subject to a duty of 2½ cents per pound.

Dried and Unsalted

91. Imports of dried unsalted cod and related species consist principally of stock fish imported from Norway. Up to 1932, stock fish was dutiable at 2½c. per pound, but in view of a decision rendered by the Customs Court, stock fish is now classified as "other fish dried and unsalted," and is dutiable at 1¼ cents per pounds. In 1936, the imports totalled about 2,000,000 pounds, valued at about $200,000.00.

Pickled or Salted

92. Pickled or salted cod and related species totalled in 1931, 72.5 per cent of the imports of this species and in 1935, 65.8 per cent. Imports of green salted fish into the United States totalled 13,000,000 pounds in 1931 and increased in 1936 to 52,000,000 pounds. Imports of dry salted fish totalled 23,000,000 pounds in 1931 and decreased in 1936 to 3,000,000 pounds. Most of the imports of green salted fish come from Canada and Newfoundland and are used for further processing into boneless fish and, to a lesser extent, canned cod fish cake material. The duty payable on Green salted fish (containing more than 43% moisture) is ¾ of a cent per pound. Dry salted (containing not more than 43% moisture) is dutiable at 1¼ cents per pound, and Boneless, dutiable at 2 cents per pound.

Smoked or Kippered

93. Imports of smoked or kippered cod and its related species, whole, beheaded, etc., which consists largely of finnan haddie (dressed and lightly smoked haddock) comes principally from Canada and amounted to about 2.4 per cent in value of the total imports of cod and its related species.

94. Imports of filleted, skinned, boned, etc., smoked or kippered cod, consisting almost entirely of smoked fillets of cod from Canada, totalled

about 4.4 per cent of the value of the total imports. Imports in 1936 were as follows:

Whole, beheaded, etc.....	928,000 pounds
Filleted, skinned and boned, etc.....	1,830,000 pounds

Canned

95. Practically all the imports of this type consist of canned fish cakes, balls and puddings imported from Norway, and in 1935 shipments from that country totalled 1,370,000 pounds and in 1936, 1,385,000 pounds, out of total imports in 1935 of 1,922,000 pounds and 1936 of 2,029,709 pounds. The remainder is supplied principally by Japan.

Exports From the United States

96. The official statistics obtainable of the exports of cod and related species from the United States indicate such exports to be limited and consist almost entirely of salted fish. The total amount exported in 1935 was 401,000 pounds at a value of $43,000.00. The total quantity of salted cod exported seems to refer to the product of Alaskan waters and exported from Pacific Coast ports to Mexico, Central America, and West Indies countries. Exports of fresh and frozen cod and related species are negligible and what is exported goes almost entirely to points in Canada nearer to the United States than to Canadian producing centers.

97. When considering the trade in cod and related species as a whole it can be quite definitely stated that exports from the United States are insignificant as compared with the imports into the United States and the domestic production of the United States fisheries.

HALIBUT

98. The rate of duty on fresh and frozen halibut imported into the United States is: 1 cent per pound.

Description and Uses

99. According to scientific information a halibut grows to a length of 10 feet, and to a weight of 700 pounds, or more, but averages 4½ feet in length and less than 75 pounds in weight. The halibut landed in the United States is classified into two classes:—

1. Pacific Coast Halibut.
2. Atlantic Coast Halibut.

100. The Pacific coast halibut is graded into two classes. Number One grade covers fish weighing, with heads off, not less than 10 pounds and not more than 60 pounds. Number Two grade are usually the fish weighing from 2½ pounds to 5 pounds.

101. A certain species of halibut is caught off the Californian coast but the catch is mostly marketed in California as a local halibut.

102. About 60 per cent of the United States catch is marketed fresh and most of the remainder is frozen. Relatively small quanties of the fresh and frozen product are produced as fillets, steaks and pan dressed fish. Halibut is a high priced fish and the demand for it in the fresh and frozen state precludes any extensive use for smoking, salting, or canning.

Production

103. The true halibut is found in the northern waters of the Atlantic and Pacific Oceans. The world catch approximates 90,000,000 pounds annually, divided into the following approximate percentages of catch:—

1. 48 per cent by United States vessels.
2. 21 per cent by United Kingdom vessels.
3. 15 per cent by Norwegian vessels.
4. 14 per cent by Canadian vessels.
5. 2 per cent by vessels of other countries.

104. About 90 per cent of the United States catch is taken on the Pacific Coast and 10 per cent on the Atlantic Coast. Of the Canadian catch about 80 per cent is taken on the Pacific Coast and 20 per cent on the Atlantic Coast.

105. The United States Atlantic catch is landed principally at Boston, and that of Canada almost entirely at ports in Nova Scotia. As regards the Pacific Coast, there is an agreement between the United States and Canada for control of halibut fishing.

Imports Into the United States

106. Practically the entire United States domestic production as well as the imports of halibut are marketed fresh or frozen.

107. The production and imports of halibut products, such as smoked, salted, and canned, are classified under other tariff rates, but the quantities imported are really insignificant.

108. Annual imports of halibut since 1922 have averaged about 9 per cent of the United States domestic catch, and in 1936 imports totalled 5,200,000 pounds, valued at $458,000.00.

109. The larger part of the imports from Canada come principally from British Columbia and enter the United States at the various distribution border points. That part of the Canadian fish imported from Nova Scotia enters through New England ports for Eastern distribution. The shipments from Canada of halibut are mostly in the fresh state and totalled in 1936 approximately 5,000,000 pounds, of which about 3,900,000 pounds was Pacific halibut, and 1,100,000 pounds Atlantic halibut. Another country catering to the United States trade is Japan, which ships mostly frozen

halibut. The total importation into the United States in 1936, from Japan, was 166,000 pounds. Very little halibut is imported from other countries.

Exports From The United States

110. Official United States statistics are not available of the export of halibut, but as far as it is known, these exports are small and go entirely to Canada. When reference is made to the Canadian official statistics it is seen that the imports into Canada are supplied practically all by the United States and Newfoundland. The United States imports into Canada are stated to consist largely of landings made in British Columbia by the United States fishing vessels.

MACKEREL

111. The rate of duty on the principal mackerel products imported into the United States are:—

Fresh and Frozen	2 cents per pound
Salted	1 cent per pound

Description and Uses

112. The Atlantic Coast and Pacific Coast species of mackerel are recognized in the United States as true mackerel, but the so-called Spanish mackerel, a related species, and the horse mackerel, or common tunny, are not so recognized.

113. The uses and the market value of mackerel are determined largely by their freshness, size, and oil content. Large, fat mackerel bring the highest price and are preferred for salting. The Atlantic Coast mackerel varies from the very fat to the very lean, but the Paeific Coast mackerel is stated as never being very fat.

114. Mackerel are marketed fresh, frozen, piekled or salted, smoked or kippered, and eanned. Appreciable quantities are canned for use as food for pet animals, and meal and oil are manufactured from the waste from the fish preserving plants.

Fresh and Frozen

115. Fresh mackerel, as landed by the fishermen, is classified as such, regardless of subsequent use. Mackerel intended for consumption fresh, is packed in crushed ice in boxes and barrels. Frozen mackerel is usually frozen round, i.e., as it comes from the water, and it is stated that when properly frozen and carefully packed it cannot be distinguished by the consumer from the fresh fish, especially if used immediately after being thawed.

Pickled or Salted

116. Pickled or salted mackerel are known in the trade as salted mackerel and are further distinguished as spit salt maekerel and as salt fillets of mackerel. Split salt maekerel are prepared from the whole fish by

splitting down the back, removing the viscera and gills, soaking in brine for several days, and packing in fresh brine in barrels for shipment. Salt mackerel fillets are prepared from the whole fish by cutting along each side of the backbone to produce two pieces of practically boneless flesh. They are soaked in brine for several days and then packed in fresh brine in barrels for shipment. Both products are subsequently repacked by distributors into smaller containers of varying sizes to meet the demands of the retail trade.

Canned

117. Canned mackerel is prepared by removing the head, the viscera and fins, extracting the blood by immersion in brine, and packing in cans, which are exhausted of air, sealed and cooked for about one and a half hours at 240 degrees Fahrenheit. There are variations in the canning processes and some packs contain an additional sauce, but the above method is employed for the bulk of the pack of canned mackerel.

118. Appreciable quantities of mackerel are used as bait by fishermen but there is no data available as to the total of such quantities.

119. It is stated that 100 pounds of whole fresh mackerel will yield the following products:

1. Fresh or frozen fillets.... ....52 pounds
2. Split salted.... ....67 pounds
3. Salted fillets.... ....50 pounds
4. Smoked or kippered.... ....50 pounds
5. Canned.... ....50 pounds

Production

120. It is believed that mackerel are available in varying quantities in practically all off-shore temperate waters.

Mackerel are caught on the high seas and in territorial waters, but the high seas fishery is generally considered to be an extension of the territorial fishery in that the migratory schools of fish follow coastal lines.

121. Official statistics indicate that the annual world catch is approximately one billion pounds, of which

1. Japan produces.... ....72 per cent
2. United States produces.... ....11 per cent
3. Other countries produce.... ....17 per cent

122. Of the Japanese catch it is stated that whilst no definiae data is available, at least 92 per cent of the catch is consumed fresh in Japan and neighboring Asiatic countries, only 8 per cent being exported.

United States Catch and Utilization

123. United States domestic mackerel fishery consists of two widely separated industries, the Atlantic fishery extending from the coast of New

Jersey to the south coast of Nova Scotia, and the Pacific fishery confined almost entirely to California.

124. Because of the large demand and relatively high price of fresh and frozen fish in the eastern market, most of the Atlantic catch is marketed in these forms. The major part of the remainder is salted with negligible quantities canned, smoked, and kippered. Taking into consideration the wide fluctuation in the Atlantic coast United States catch, the quantity of mackerel frozen is stated to have remained fairly constant. The United States domestic production of frozen mackerel, according to statistics, has averaged over a number of years, a quantity of 13,000,000 pounds. Frozen mackerel are sold mostly during the winter months. The high prices prevailing for fresh and frozen mackerel can be regarded as a retarding influence in the development of any United States domestic salt mackerel industry, for it is only when there is a glut of fresh fish that the salters are able to obtain raw material at the prices, which such an industry demands.

125. As regards the Pacific Coast fishery, this activity is of recent devlopment and the bulk of the catch in the Californian area is canned.

126. The fishery has developed rapidly into a large one for statistics show that whilst in 1926 only 277 cases, or 13,000 pounds, were canned, in 1935 the production reached 1,758,000 cases, or 84,000,000 pounds of fish. The mackerel is lean and contains little oil or fat and is, therefore, undesirable for salting.

Foreign Fisheries

127. The entire Canadian catch, which is the principal one exported to the United States, is on the Atlantic coast. There is only a very limited market in Canada for fresh and frozen mackerel and the bulk of the Canadian catch appears to be diverted to other uses, i.e, export trade.

128. Information is not available as to the ultimate uses of mackerel caught in other countries. It is known, however, that Norway, the United Kingdom, and the Irish Free State have well established markets at home and abroad for salted mackerel, and the bulk of the catch is used in this way. It should, however, be emphasized that large quantities are used fresh for home consumption in these countries.

Imports Into the United States

129. Imports of fresh or frozen mackerel, and of pickled or salted mackerel comprise practically the whole of the United States import trade of this fish. There has been wide divergency in the quantities imported. In 1931, 22 per cent of the mackerel imports were fresh and frozen; in 1935 imports had decreased to 3 per cent, increasing to 8.5 per cent in 1936. On the other hand, pickled and salted accounted for 78 per cent of the total imports in 1931; 97 per cent in 1935, and 91.5 per cent in 1936.

130. All imports of fresh mackerel and practically all imports of frozen mackerel are from Canada, due to the proximity of that country and

the perishable nature of the product. Imports of fresh and frozen mackerel were:—

1,826,000 pounds.... ....in 1931
127,367 pounds.... ....in 1935
451,291 pounds.... ....in 1936

131. Total imports for salted mackerel were:—

6,727,000 pounds.... ....in 1931
3,810,000 pounds.... ....in 1935
4,869,000 pounds.... ....in 1936

132. The importation of mackerel into the United States, as regards the salted products, is a great deal dependent upon the abundance or scarcity of the salted fish suitable for the United States market. Only the better grades of mackerel are shipped to the United States and the remainder go principally to tropical countries. Imports into the United States from European countries consist almost entirely of split salt mackerel while those from Canada are split salt mackerel and salted fillets. The United States and Canada can really be said to be the only two countries producing salted mackerel fillets.

133. In regard to the general importation into the United States of mackerel, an investigation was made some time ago, by the authorities, on an application received from the United States domestic producers for an increase in the rate of duty. After a thorough investigation the tariff commission deferred action and in 1936 the investigation was dismissed without prejudice and the rate of duty remained unaltered.

Exports From the United States

134. The exports from the United States of mackerel can be said to be almost exclusively of the canned product. The Phillipine Islands, Italy and Cuba are the principal foreign markets.

SALMON

135. The rates of duty on the principal salmon products imported are as follows:—

Fresh or frozen	1½ cents per pound
Pickled or salted, not in oil, etc.	20 per cent ad valorem
Smoked, or kippered, not in oil	25 per cent ad valorem
Canned: except packed in oil, etc.	25 per cent ad valorem

Description and Uses

General

136. The trade restricts the name of salmon to five species of North Pacific salmon, the Atlantic Salmon, and the Steel Head Trout. The colour of the flesh, which is stated to vary even within the species, and the effect

produced on the flesh by methods of preserving such as freezing, canning, salting, or smoking, largely determines the use and the market value of any one salmon.

137. The following table as regards approximate weights of salmon is interesting:—

Salmon—Approximate weights.

SPECIES	*Weight in Pounds*	
	Maximum	*Average*
Chinook or King	100	22
Chum or Keta	30	9
Pink or Humpback	14	4½
Coho or Silver	30	9
Red or Sockeye	12	6½
Atlantic Salmon	70	15
Steelhead Trout	20	7

138. Salmon as landed by the fishermen is classified as fresh fish regardless of its subsequent use. There is the fresh salmon trade which does not process the fish but either sells it locally or ships it to distant places for table use, and there is the frozen salmon which is sold at will. Frozen salmon cannot be distinguished by the average consumer from the fresh fish, especially if used immediately upon being thawed, and to-day the methods of freezing prevent, to a great extent, the softening of the flesh after thawing.

139. Canned salmon is the dressed fish cut into segments, sealed in cans, and cooked until the bones are soft. Canned salmon is graded commercially on species, colour, fat content, and geographical origin, with red meat fish in the greatest demand.

140. Mild cured salmon is lightly salted fish split into two parts. It is really a means of preserving for subsequent smoking, and the fish so treated retain the delicate flavour that is lost in heavy salting or hard curing. To prevent spoilage it must be kept in cold storage.

141. Pickled salmon contains more salt than mild cured and less than dry salted. Preparatory to pickling, the fresh fish are beheaded, split down the back to the tail, eviscerated, two thirds of the backbone removed, and the black lining of the body cavity scraped away. The principle use of pickled salmon is as raw material for spiced salmon.

142. Dry salted salmon is dressed salmon, heavily salted and is not greatly used.

143. Smoked salmon, on account of its perishability and the relatively stable nature of its raw material (mild cured salmon) is prepared for immediate consumption principally in the large consuming centers. It is a very high priced product and, therefore, the best raw material is used. In preparation of smoked salmon, the mild cured fish are soaked in fresh water over night to remove most of the salt, then drained and hung in the smoke houses over a low fire of non-resinous wood for eight to ten hours if intended for immediate consumption, or for two days if intended for shipment. The object is to give the fish smoke rather than heat as, in the latter case, they would be partially cooked. When an immediate market is not available the smoked product can be held for a short time in cold storage.

144. Kippered salmon is a form of smoked salmon prepared almost entirely from dressed fresh and frozen white salmon. The frozen fish as needed, are thawed in cold running water, cut into pieces of a pound or less, pickled in strong brine for several hours, dipped in vegetable colouring, placed on trays, and smoked over a medium fire for sixteen to eighteen hours to dry and to be slightly smoked. The fire is then raised to increase the temperature in the smoke house to from 250 to 275 degrees Fahrenheit, in order to finally bake the pieces which remain on the trays for another twenty-five to thirty-five minutes. The finished product is at its best immediately after smoking, and most of it is sold the day it is baked.

145 Salmon meal and oil are prepared from waste from the preserving plants. Salmon eggs for food caviar is a by-product of the preserving industry.

146. Statistics state that 100 pounds of whole fresh salmon will yield the following:—

1.	Fresh steaks	62 pounds
2.	Mild cured	70 pounds, which, in turn, will yield 63 pounds of smoked fish
3.	Pickled	67 pounds
4.	Kippered	60 pounds
5.	Canned	68 pounds, if put up in 1 lb. tins or 60 pounds, if put up in ½ lb. tins

Production

147 The greater part of the United States domestic production of salmon is confined to the territorial waters of the North Pacific. However, some United States vessels operate off the Pacific Coast of Canada, in international waters.

148. The absorption of the North Pacific supply is approximately 86 per cent canned, 12 per cent salted, and 2 per cent sold fresh, frozen, and smoked. In addition it might be said that some of the production of salted, is subsequently smoked.

149. To all intents and purposes there is practically no production of salmon by the United States domestic fishery on the Atlantic coast, and all

salmon from this area is shipped into the United States by Canada and Newfoundland.

Imports Into The United States

150. Statistics indicate that imports into the United States of salmon from various countries have never amounted to more than 2 per cent of the total United States domestic production. Imports of fresh salmon are, for the most part, sold for immediate consumption or for mild curing. It can be stated quite definitely that no raw salmon paying the import duty is canned. This can readily be appreciated when the relative market prices of the fresh and the canned product are considered.

151. The statistics officially published do not show fresh and frozen salmon separately, but from enquiries made it would seem that the imports of fresh salmon exceed those of the imports of frozen salmon. Imports of pickled or salted salmon consist entirely of pickled and mild cured salmon, no dry cured salmon being imported. From enquiries in the trade it can be safely estimated that at least 80 per cent of the imports under the classification, pickled or salted, are the mild cured salmon, the product consisting of the lightly salted salmon sides used for the production of smoked salmon. Imports of mild cured salmon into the United States come mainly from Canada with the Soviet Union ranking as second most important source. Pickled salmon is imported into the United States principally from Newfoundland and Canada.

152 Imports into the United States of canned salmon come almost entirely from Japan and Canada, and it is remarkable to show that, although previous to 1936 the imports from Canada considerably exceeded the imports from Japan, in 1936 imports from both countries were practically level. From enquiries it appears that the imports of canned salmon consist almost exclusively of lower priced varieties, pink and chum salmon.

Exports From The United States

153. The exports from the United States of salmon can be said to be divided as follows:—

90 per cent canned salmon.
5 per cent fresh and frozen salmon.
5 per cent pickled and salted salmon.

154. Canned salmon and frozen salmon are exported chiefly to the United Kingdom, fresh salmon to Canada, and pickled or salted salmon chiefly to Germany. Exports of salmon for 1936 totalled 46,216,000 pounds, divided as follows:—

Canned	38,983,000	pounds
Salted	1,986,000	"
Fresh and frozen	5,327,000	"

155. Canned salmon, the chief type exported, is shipped all over the world, but it has to be recorded that the United States packers have always

had on hand an exportable surplus of canned salmon. The United States exports total about 12 per cent of the total United States domestic production.

156. The exports of the United States to the United Kingdom have declined somewhat with the development of red salmon canning in Siberia by the Japanese operating under concessions granted by the Soviet Union. In addition there has been a decline in the United States exports of pink and chum salmon due to preferential duties accorded to Canadian exports in some parts of the British Empire and in France.

157. Exports of fresh salmon go entirely to Canada and exports of frozen salmon go almost entirely to Europe where they compete with Canadian and Newfoundland frozen salmon and the locally caught fresh salmon. In 1935 it is shown that the United States exported 3,460,000 pounds of frozen salmon chiefly to the United Kingdom and France, and for that year the total exports of fresh and frozen salmon equalled 49 per cent of the imports.

158. Pickled or salted salmon exported from the United States consists almost entirely of mild cured, lightly salted salmon. Germany is the chief foreign market, but in recent years exports to that country have declined appreciably and statistics do not report any corresponding increase in the exports to other countries.

SEA HERRING

159. The rates of duty on herring are as follows:—

Fresh sea herring	Free.
Frozen sea herring, naturally and artificially frozen	Free.
Canned herring packed, in oil	
(a) valued at not more than 9 cents per lb.	44 per cent Ad Valorem.
(b) valued at more than 9 cents per lb.	30 per cent Ad Valorem
Not packed in oil	25 per cent Ad Valorem.
Salted Herring	1 cent per pound.
Smoked or kippered herring:	
(a) Salt, dry smoked	5-8ths cent per pound.
(b) Other types	1¼ cents per pound.
Split, skinned or boned Herring:	
(a) Boned	1½ cents per pound.
(b) Other	3 cents per pound.

Description And Uses

160. The sea herring is the most widely distributed of all fish genera. Besides the actual herring there are the commonest members of the genus, such as the sprat and the pilchard. In a number of countries statistics re-

lating to these fish are not segregated, and it is, therefore, particularly difficult to refer to herring alone. In addition to sprats and pilchards, anchovies and sardines are included. The term sardine is not applied to a species of fish, but refers also to canned sea herring and pilchards, as small fish of the first and large and small fish of the second species are sold as sardines.

161. In addition to the large quantities of herring marketed fresh and frozen, the sea herring, together with what one might call its related species, are sold in considerable quantities as raw material for the several major fish preparing and fish preserving industries. Large quantities are canned, pickled, and salted, and the waste from the preserving plants is used in the manufacture of oil. Considerable quantities are also used by fishermen for bait. In addition, there is one further industry that is increasing in its usefulness. An irridescent substance known as guanin is obtained from the herring scales and is used in the manufacture of artificial pearls. According to data collected, this industry in 1936 was valued at an income of approximately $3,000,000.00.

162. Data is not available as to the percentages of the world catch utilized in the various sections of the industry. It is believed, however, that the greater part of the fish caught is used in the manufacture of meal and oil, with pickled or salted herring second, canned herring third, and smoked and kippered herring next, all of these exceeding the quantities of fresh or frozen herring consumed.

Pickled Or Salted Herring

163. Herring is preserved by salt, and by salt and vinegar, in more forms, and by more methods, than any other species of fish. The names and grades of the different products are determined by geographical origin, and the size and fatness to the fish, the method of packing, salting, the quantity of blood and viscera remaining in the flesh, the quantity of milt and roe in the fish, and the quantity and kind of spices used. The principal types of pack are Scotch Cure, Holland, Round, Split, Bismarck, Pickled, Roused, and Marinated. Most round and pickled herring are the intermediate products for subsequent use for marinating or smoking. Roused herring is an intermediate product used entirely for smoking. Most of the other types are pickled and spiced by distributors and retailers or by the users of the products.

164. From enquiries made it has been certainly demonstrated that of the types above referred to, the Bismarck herring is increasing considerably in its sale and there are several new packing plants in the United States putting up this pack of herring in various types of packages.

Canned Herring

165. Herring packed in airtight containers are chiefly:—

1. Small herring, packed in olive or cottonseed oil, principally in half pound and one pound tins and marketed mostly as

sardines packed in oil. The oil is usually added after the cooked fish are packed in tins, prior to processing. Practically all are beheaded and eviscerated. There are some packs that are further processed by being skinned and boned, and information points that a number of European producers also slightly smoke their fish before packing.

2. Small Herring in tomato sauce, mustard sauce, and the natural oil of the fish, are packed principally in one pound, half pound and quarter pound tins and mostly marketed as sardines with the style of pack indicated on the label.

3. Herring kippered are packed in the natural oil of the fish. These products are labeled kippered herring, boneless kippered herring, fillet of kippered herring, and kippered snacks.

Smoked or Kippered but not Canned

166. Smoked or kippered herring are principally:—

1. Hard dry smoked herring (bloaters). In preparing this product the process is that the fish is soaked in salt brine for about forty-eight hours and then smoked for about six weeks. Large herring are preferred in the manufacture of bloaters, especially for the export trade, whereas smaller fish are preferred when it is intended that the ultimate use should be for the manufacture of boneless herring.

2. Hard smoked, soft cured bloaters. This product is prepared from various types of pickled or salt herring, by soaking the salted fish for about a week to remove the surplus salt, and then heavily smoking them. The final product is of a perishable nature and is, therefore, prepared mainly for immediate consumption. This type of cure is sometimes known as Newfoundland Johnnies.

3. Boneless Herring. This product is manufactured from the hard cured bloaters, as referred to in No. 1 by removing the head, backbone, belly bones, skin, and part of the belly, leaving two strips of practically boneless flesh.

4. Kippered Herring. In the preparation of kippered herring, fresh fish are split down the back, opened out flat to remove all entrails, placed in salt brine for about an hour and smoked for varying periods according to the colour and flavour desired. The finished product is perishable and, unless canned, must be held in cold storage. In the United States, kippered herring are manufactured principally from the frozen herring, and, according to information many foreign countries prepare this type of product from both the fresh and the frozen.

Meal, Scrap, And Oil

167. Herring meal, scrap, and oil are manufactured from fresh whole fish, and from the waste of the fish preparing and preserving industries. In general, the process consists of cooking the raw material, extracting the oil and the water by pressure, and draining or drying the pressed cake to produce green scrap. The scrap is thoroughly dried then and marketed as scrap, or further ground and marketed as meal to be used as poultry and animal feed as well as fertilizer. Herring oil is used primarily in the manufacture of soap and to a smaller extent in paints, leather and miscellaneous products. In the United States it is stated that increasing quantities are being used in the manufacture of lard substitutes.

Production

168. Reviewing the statistics of various herring producing countries it is impossible to arrive at the actual catch of sea herring because the catches of pilchard and sardines are included in such group statistics.

169. The production of fresh and frozen sea herring for use as such, is not as important as that part of the production used in the canning, salting, and other industries.

170. The data available shows that approximately 350 million pounds of canned herring, pilchards, and sardines are produced annually. The United States domestic production is largely pilchards (sardines) packed in tomato sauce, and the European production is principally small sea herring and pilchards packed in olive oil.

171. Data covering pickled and salted herring, which also includes pilchards and sardines, shows that approximately one and a half billion pounds are produced annually.

172. Of smoked and kippered herring the data available shows that approximately 180 million pounds are prepared annually with the United States producing about four per cent of this amount.

173. Meal and oil are manufactured in practically all countries reporting catches of these species of fish. Actual production data is not available but from enquiries made it seems that in European countries meal and oil are manufactured almost entirely from the waste of preserving plants and are of minor importance, as the bulk of the catch is preserved for food. In Japan and the United States, however, it is stated that whole fish as well as the waste from preserving plants are used, and in these two countries the manufacture of meal and oil uses more fish than that of the prepared food products.

174. In the United States the industries are centered in three widely separated areas, i.e., Maine, California, and Alaska. The Maine fishery is confined to sea herring and the catch, together with the fish imported, is used principally in the canning of sardines and in the manufacture of various types of smoked herring.

175. The Alaskan industry is also confined to sea herring and it is stated that the catch varies considerably from year to year and to some extent is governed by the anticipated United States domestic demands for pickled or salted herring. Information received indicates that of the catch about 80 per cent. is used in the manufacture of meal and oil 17 per cent. in the preparation of pickled or salted herring, and 3 per cent. for bait.

176. The Californian catch of fish of this group is confined almost entirely to pilchards.

Imports Into The United States

177. *Introduction*:

The total imports of herring, exclusive of oil and meal, have averaged for the last five years, an annual value of $5,894,000.00, of which the imports are divided as follows:

1.	Norway	46 per cent.
2.	United Kingdom	16 per cent.
3.	Portugal	12 per cent.
4.	Netherlands	7 per cent.
5.	Canada	6 per cent.
6.	Newfoundland	3 per cent.
7.	Other countries	10 per cent.

178. In types of pack the percentages of imports were distributed approximately as follows:—

1.	Canned sardines in oil	46 per cent.
2.	Pickled or salted herring	40 per cent.
3.	Canned sardines and herring not in oil	9 per cent.
4.	Fresh herring	2 per cent.
5.	Frozen herring	1 per cent.
6.	Smoked or kippered herring whole or beheaded	1 per cent.
7.	Smoked or kippered herring, eviscerated, split, skinned, boned, or divided into portions	1 per cent.

Fresh Sea Herring

179. Imports of fresh sea herring in 1936 were valued at $317,000.00, representing three per cent. of the total value of imports of herring and its species. Of these imports over 99 per cent. came from Canada and were entered at Maine ports, being employed almost entirely within that state in the herring smoking industries. Imports have fluctuated widely from year to year, and the quantities imported have been largely determined by the demands of the canners and smokers and by the supplies of suitable fish in the United States waters.

Frozen Sea Herring

180. Imports of frozen sea herring have shown a sharp decrease since 1931. In average annual value, the imports total about $81,000.00, i.e., one per cent. of the total imports. In 1936 the imports were valued at approximately $70,000.00. Of these imports 96 per cent. came from Canada and of the total imported it is stated that at least 70 per cent. were used in the manufacture of kippered herring.

Canned Herring not in Oil

181. Most of the imports into the United States from the two principal sources of supply, i.e., Norway and the United Kingdom, consisted of kippered herring packed in the natural oil of the fish. The total imports averaged, for the last five years, about half a million dollars or nine per cent. of the total imports of herring. In actual data the total imports in 1935 were 71 per cent. greater than in 1931, and during that period the imports from Norway more than doubled, whilst those from the United Kingdom remained fairly constant. In 1936 imports totalled 12,880,000 pounds, of which Norway supplied 80 per cent.

Pickled or Salted Herring

182. Imports of pickled or salted herring constitute about 30 per cent. of the total value of the imports of herring with an average annual value of approximately $1,800,000.00. The total imports can be said to be distributed in the following percentages:—

1.	United Kingdom	45 per cent.
2.	Netherlands	22 per cent.
3.	Newfoundland	9 per cent.
4.	Canada	6 per cent.
5.	Norway	5 per cent.
6.	Sweden	4 per cent.
7.	Other countries	9 per cent.

183. In 1936 information points to the fact that approximately all imports from the United Kingdom, approximately 65 per cent. from Newfoundland, and 75 per cent. from Norway, consisted of Scotch cured herring. Imports from the Netherlands are practically all Holland herring. Other imports consisted principally of the types of fish used largely in the manufacture of spiced, marinated, and smoked herring. Also are included appreciable quantities of Bismarck herring from Germany and Norway.

184. Reviewing statistics from 1931 to 1936 it is shown that imports of this cure of herring have recovered sufficiently to reach, by the end of 1936, the second to the peak year of 1931. Averaging the six years ending 1936 imports from Newfoundland. Norway, and Sweden, show an increase, while imports from the United Kingdom dropped considerably as compared with imports from that source in 1931.

Smoked or Kippered Herring, Whole or Beheaded, But not Further Advanced

185. The average annual imports from 1931 to 1936 of this type of herring, with a value of approximately $52,000.00, represents one percent of the total imports of herring. Divided into percentages, imports are classified as follows:

1.	Canada	48 percent.
2.	Germany	17 percent.
3.	Newfoundland	12 percent.
4.	United Kingdom	10 percent.
5.	Other countries	13 percent.

186. Imports from Canada consisted almost entirely of the hard dried smoked herring which is primarily produced for the preparation of smoked boneless herring of the Maine producers. Imports from Newfoundland and Labrador have not held the above average position and decreased very considerably in 1936. In 1935 imports from Newfoundland totalled approximately 150,000 pounds of hard smoked, soft cured bloaters, i.e. Newfoundland Johnnies, and in 1936 imports of only 1,600 pounds were reported.

Smoked or Kippered Herring, Eviscerated, etc.

187. Imports of herring eviscerated, split, skinned, boned, or divided into portions, constitute about one percent of the total imports of herring with an average annual value, from 1931 to 1936, of $84,000.00, divided as follows:

1.	United Kingdom	73 percent.
2.	Canada	24 percent.
3.	Other countries	3 percent.

188. Imports from the United Kingdom consisted almost entirely of the kippered herring whereas those from Canada were boneless herring.

189. Statistics for the last two years indicate that in 1935 and 1936 the imports of both of the above referred to products show substantial increases over the previous years.

Exports From The United States

190. Statistics available of the export of herring from the United States do not refer specifically to herring. Information, however, points to the fact that exports of fresh and frozen herring are insignificant, exports of pickled and salted herring have not exceeded a value of $20,000.00, and there is only a small trade consisting of salt dry smoked herring shipped to certain of the West Indies markets.

191. Actually the export of canned herring can be stated to consist of at least 95 percent, Californian pilchards. There has been a marked decline in exports to France which used to be a good market for Californian

pilchards, but, on the other hand, increased quantities have been shipped to Canada, Cuba, and Egypt. The markets taking the bulk of United States canned herring pack are, the Phillipine Islands with 24 percent, and the United Kingdom with 16 percent.

SMELTS

192. Fresh and frozen smelts, the only form of smelts imported into the United States, have been free of duty under the tariff acts since the act of 1913.

Description And Uses

193. Smelts, in accordance with the information given in the biological reports, belong to the genus "osmerus" of the family "argentinidae", are stated to be closely related to the salmon which they are said to resemble in many respects except size. The most common American smelt inhabits the sea coast from the Gulf of St. Lawrence to Virginia and in the winter and early spring ascend the rivers in large numbers for the purpose of depositing their spawn. This type of smelt is also found in several of the inland lakes. The European smelt is scarcely distinguishable from the American. Other species are found on the eastern and western Pacific coasts including the surf smelt which is a related fish about a foot long found abundantly on the coasts of California and Oregon. The Atlantic smelt attains a length of 14 inches and a weight of about half a pound, but the average is stated to be much less, ranging from 8 inches to 10 inches in length and about eight to twelve fish to the pound. The larger sizes command higher prices. Whilst the bulk of the United States domestic catch is marketed fresh, the imports of smelts are mostly in the frozen state.

Production

194. Statistics available show that the world production, even taking into consideration the fluctuations due to seasonal runs of the fish, averages approximately 29,000,000 pounds, of which Canada produces 21 percent and the United States 11 percent.

195. Dealing with the United States production, the larger percentage of the catch is taken off the Pacific coast. In 1931 the division was:—

1.	Pacific Coast Catch	76 percent.
2.	Atlantic Coast Catch	24 percent.

196. Statistics are not complete as regards the catch in recent years but in 1934 it shows a total collection of approximately five and a half million pounds, with:—

1.	Pacific Catch	70 percent.
2.	Lake Michigan Catch	19 percent.
3.	Atlantic Catch	11 percent.

Imports Into The United States

197. Imports of smelts into the United States come chiefly from Canada with small quantities from Newfoundland, the Netherlands, and Japan. The greater part of the Canadian production is on the Atlantic coast. The bulk of imports of smelts, about 90 percent, are shipped to the North Eastern United States markets where the local supply is inadequate, but an appreciable quantity is also imported by the Mid-Western States. In 1936 Canada shipped into the United States 8,341,000 pounds, Newfoundland 173,000 pounds, Netherlands 3,000 pounds, and other countries 95,000 pounds.

Exports From the United States

198. It can be stated that there are no exports of smelts from the United States.

SHELLFISH

199. The imports of shellfish for consumption by the United States market which have particular interest to Newfoundland cover:—

(1) *Lobsters*
  (a) Not canned.
  (b) Canned.

(2) *Scallops*
  (a) Fresh.
  (b) Frozen.

(3) *Clams, Quahaugs* not in airtight containers.

(4) *Fish* not specially provided for.

The imports of fish under the above headings enter the United States free of duty.

Lobsters, Description And Uses

200. The United States domestic lobster fishery can be divided into two parts:—

(1) Common Lobsters.
(2) Spiny Lobsters.

201. The Common Lobsters can be referred to as the principal Lobster, whilst the Spiny Lobster is of secondary importance and is also known as the Craw or Crayfish.

Production

202. The production of the United States domestic fisheries Common Lobster is located almost entirely in the New England States, divided approximately, 60 per cent from the Maine Fisheries, 18 per cent from the

Massachusetts fishery, 12 per cent from other New England Fisheries and 10 per cent from Middle Atlantic States.

203. The production of the Spiny Lobster is located in the South Atlantic and Pacific Coast, being divided approximately 23 percent from the South Atlantic and 77 percent from the Pacific Coast Fisheries.

204. The United States domestic production for 1936 totalled approximately 13 million pounds of which 11½ million pounds is of the Common Lobster, and 1½ million pounds of the Spiny Lobster.

Imports

205. The statistics of Lobster imports classed under Tariff No. 0083.0 include the Common Lobster as well as Spiny Lobster, in both categories of fresh or frozen. Separating however the imports from the various countries it will be seen that imports from Canada are by far the largest, and represent the following percentages of the total imports:

1931	89.3 percent.
1934	88.5 percent.
1935	83.5 percent.
1936	79.3 percent.

206. The decrease in the Canadian percentage of imports has gone to the benefit of such countries as British West Indies, Cuba and the Union of South Africa, principally the latter, covering the spiny lobster or crayfish.

207. The increase in exports by the countries cited above is due largely to the difference in price and to the wide acceptance of frozen South African Craw fish tails, the sales of which have increased very appreciably since 1934.

208. The United States domestic lobster producers have lodged complaints with the Department of Commerce, Washington, in regard to the desirability of compelling the Spiny Lobster or Crayfish to be marketed as such and sold to the consumer under their proper name. No decision has, as yet, been taken.

209. Similarly to the Fresh Lobster, Canned Lobster is admitted free of duty, and Canada dominates the exports to the United States of this product as the following percentages of the total imports indicate:—

1931	97 percent.
1934	91 percent.
1935	71 percent.
1936	79 percent.

210. The decrease in Canadian shipments is due to a large decrease in the total imports which in 1931 totalled 1,702,121 pounds as compared with 864,915 pounds in 1936. In addition there are, as well, increases in shipments from other countries.

211. Exports of Lobsters from the United States are negligible.

Scallops, Description And Uses

212. The development of the scallop fishery is relatively new. This shellfish has created a large interest technically, due to its brief span of life, about two years; its beautiful sculptured shell; its coloured fringe of eyes; its dual sex construction; its ability to attach and detach itself at will and its peculiarly odd method of swimming.

213. The following data gathered from United States sources may be useful, as there appears to be little information existing as regards the scallop found in Newfoundland waters:—

Length of life—20 to 26 months.
Maximum size—3.72 inches.
Legal size scallop—must have a well defined annual growth ring.
Sexually mature when one year old.
Spawning period from June 15th to August 15th.
Size of eggs—1-400th of an inch.
Hermaphrodite—both sexes in same individual.
Average number of eggs—about two millions.
Swims in water about 10 to 12 days before "setting" at normal temperature of 72°F. Retains through life the power of swimming for short periods of time.
Attaches itself at end of free swimming period when about twelve days old by means of a bundle of threads. (byssus). Retains power to do this through life.
Withstands salinity of 1.010 to 1.027.
Will repair slight injuries to shell.
Feeds on microscopic plants (diatoms) which are contained in the water.
A bushel of scallops in shell yields an average of 2½ to 3 quarts of "Eyes". The "Eye" of the scallop is the abductor muscle which is the part used for food.
The edible portion is approximately 17.7 per cent. of total weight.
The scallop may be found at a depth of 60 feet, but is more than often taken in about 25 feet of water.

Production

214. According to information collected the following data in connection with the scallop fishery has to be noted:—

(1) Only a portion of the total area is, in any one year, productive.
(2) The length of the season varies in the different localities.
(3) That the Scallop and the Quahaug or hard clam fisheries supplement each other in many places.

215. The United States domestic production can be divided into two classes:—

(1) The Bay Scallop Fishery.
(2) The Sea Scallop Fishery.

and the production of each class is usually:—

20 percent. Bay Fishery.
80 percent. Sea Fishery.

216. The United States market usually prefers the small bay scallop but as this type is comparatively scarce, the larger sea scallop finds a ready market.

217. The statistics of production and value show that Bay scallops average 30 cents per pound, and the Sea scallop 11½ cents per pound.

218. A survey of the United States domestic production demonstrates the varying catch and, in a good productive year, such as the early part of 1937 has been, buyers purchase heavily and freeze their surplus purchases for selling during the non-fishing season.

219. The average of the United States domestic production totals five and a half million pounds.

Imports

220. The growth of the scallop market in the United States is shown in the following import figures of this shellfish from 1931 to 1936:

1931	153,427	pounds
1934	867,576	pounds
1935	1,455,011	pounds
1936	2,652,575	pounds

221. The imports are mostly divided between Canada and Japan. In 1931 imports from Canada were 80 per cent. and Japan 20 per cent. of the total imported. In 1936, imports from Canada were 47.7 per cent. and Japan 50.2 per cent.

222. Previous to 1936, the import statistics were compiled, grouping together imports of fresh and frozen scallops, but the authorities have now divided the classification. Statistics for 1936 show that imports of fresh scallops were valued at 17.2 cents per pound and of frozen scallops at 12.5 cents per pound. The imports of fresh scallops in 1936 totalled 1,363,794 pounds of which Canada supplied 1,200,644 pounds, and the imports of frozen scallops in 1936 totalled 1,288,781 pounds of which Japan supplied 1,207,115 pounds.

223. There are no exports from the United States.

Clams and Quahaugs, Descriptions and Uses

224. The Clams and Quahaugs can be actually divided into two classes:—

(1) Clams, i.e., soft shell clams.
(2) Quahaugs, i.e., hard shell or little neck clams.

225. Little information exists as to the exact classification of the clams found in the Newfoundland waters, so the following data collected may be of service:—

Length of life: Uncertain, at least 20 to 25 years.
Legal size: (2 inches) is about 2½ years old.
Sexually mature in second year when about 1½ inches in length.
Spawning period—June to August.
Average number of eggs (2½ inch fish) about two millions.
Size of eggs—1-325th of an inch. ....
Swims in the water before "Setting" about 10 to 12 days when temperature is normal 72°F.
Attaches itself at end of free swimming period when about 12 days old by means of a fine thread (byssus) which it retains until about ½ inch long.
Burrows freely through life.
Withstands salinity of 1.015 to 1.022.
Will repair most injuries to shell.
Feeds on microscopic plants (diatoms) which are contained in the water.
A bushel in shell usually yields about 6 quarts of "shucked" fish.
Food value. Edible portion is approximately 17.85 per cent. of the total weight.
It has been found that an acre of shore with moderate average of 20 two and a half inch quahaugs per square foot, contains 800,000 quahaugs, approximately 1500 bushels, and at spawning, these may throw out 800 billions of eggs.
With soft shell clams at a low average of 25 two and a half inch clams per square foot, an acre contains 1,089,000 clams, approximately 1000 bushels, and at spawning, these may throw out five thousand billions of eggs.

226. The most essential condition for shell fish growth is a good current, not necessarily of a swift one, but a fair circulation of water is needed. The flow of water performs three services:—(1) it determines the supply of food for the body and lime for the shell; (2) it governs the supply of oxygen for the gills and (3) it acts as a sanitary agent.

Production

227. The United States domestic production can be divided into two classes:—

(1) Soft shell clams.
(2) Hard shell or Little Neck clams, i.e., Quahaugs.

228. The production statistics indicate that approximately an equal quantity of both classes are taken.

229. The soft shell clams are principally fished in the New England States, whereas the hard shell clams or quahaugs are spread over the New England, Middle Atlantic, Chesapeake, South Atlantic and Gulf States.

230. The principal markets for hard shell clams have been Boston and New York, but recently sales are on the increase in the Middle West States.

231. The fish are shipped in bags or barrels. When shipped in barrels, holes should be made in the sides and bottom to allow free air circulation, and to let the water out.

232. The production is culled and varies according to the localities, but the main three culls of the hard shell clam are:—

(1) Little Necks 1½ to 2½ inches.
(2) Sharps (a) 2¼ to 3 inches.
(b) 3 to 3¾ inches.
(c) 3 to 3¾ inches up.
(3) Blunts.

Prices are approximately:—

(1) Little Necks $4 to $5 per bushel.
(2) Sharps and Little Blunts $3 to $4 per bushel.
(3) Large Blunts $2 to $2.50 per bushel.

233. The price for Little Neck Clams is mostly constant, but the others vary a great deal, dependent upon the supply and demand. All of the contents of the Quahaug or Hard Shell Claim is used and, therefore, the meat of the Blunts, i.e., older fish, being tough and inclined to be slightly yellow in colour, is rendered less palatable and, therefore, fetches the lowest price.

Imports

234. The imports of clams and quahaugs are grouped together under one classification, class No. 0087.0 not in airtight containers, and it is therefore difficult to determine the percentage of each specie. Enquiries, however, indicate that a large part of the imports refer to quahaugs or hard shell clams.

235. The following table gives statistics of imports for 1931-1935 and 1936:—

1931—3,143,645	pounds	$64,547.00
1935—5,702,244	pounds	$76,876.00
1936—4,529,718	pounds	$60,841.00

Canada is the chief source of supply as the following comparative figures show:—

1931—3,093,114	pounds	$60,395.00
1935—5,662,018	pounds	$74,756.00
1936—4,475,155	pounds	$56,880.00

Newfoundland participation in this trade is as follows:—

1931—15,760	pounds	$ 335.00
1935—Nil		
1936—13,703	pounds	$2,375.00

Exports

236. There are no exports from the United States of any importance.

Shellfish Unspecified

237. Under the classification of "Shellfish unspecified" in the import tariff of the United States there are incorporated species, the natures of which, are difficult to determine.

United States Description And Production

238. Turning to the United States domestic production of Shellfish, and drawing the comparison between the main headings of Shellfish allocated in the Tariff list, a reasonable assumption is that the unspecified Shell fish imported under the Tariff Class No. 0087.7 generally comprises:

Mussels
Squid
Frogs
Abalone
Worms.
Shells
Sponges, etc.

to a total quantity of approximately 47 millions pounds, and a value of two million dollars.

Imports

239. Imports of Shellfish Tariff No. 1761, Class No. 0087.7 are duty free.

240. The imports for the years 1931-1935 and 1936 were as follows:

1931—4,147,719 pounds	$569,360.00
1935—4,487,156 pounds	$521,821.00
1936—3,513,431 pounds	$451,137.00

241. Analysing the last report year 1936, the following table gives the exporting countries and their respective percentages:—

Mexico	46.5 per cent.
Japan	23.6 per cent.
Spain	7.0 per cent.
Portugal	6.9 per cent.
Newfoundland	4.2 per cent.
Canada	3.2 per cent.
Other Countries	8.6 per cent.

242. The imports from Newfoundland can no doubt be allocated to squid.

Exports

243. The exports from the United States of Shellfish "unspecified" average approximately 255,000 pounds at a value of approximately $78,000.

MISCELLANEOUS FISH

244. At the commencement of this report, the following quotation from the Report of the Newfoundland Fishery Research Bureau for the year 1935 was quoted:—

> "It is sometimes stated that Newfoundland's fishery resources are virtually limitless and that, over and above cod, many other species of fish should be utilized. There is a great deal of truth in this statement. The material exists to provide an income far in advance of that normally extracted from the fisheries, assuming always that certain difficulties could be overcome."

245. The report goes on to cite certain fishes and therefore an investigation into the market possibilities of several of them was undertaken.

246. It is somewhat difficult to ascertain exactly what quantities of each specie are landed or imported into the United States, as all published statistics and the method of their compilation does not allow of a proper division, such imports being landed as miscellaneous fish and imports grouped together under the general classification, "Fish not specially provided for" in each class of the tariff.

247. The imports and values of such fish in each respective class, which may be of interest to Newfoundland, are as follows:—

247. (Continued)

Tariff Paragraph	*Rate of Duty*	*Class No.*	*Article*	*1936*	
				Pounds	*Value*
717 (a)	1c. per pound	0056.0	Fish, fresh or frozen whole, beheaded or eviscerated or both....	5,044.403	$183,910
717 (b)	2½c. per pound	0060.0	Fish, fresh or frozen fillet, skinned, boned, sliced or divided....	9,255,303	$893,645
717 (c)	1¾c. per pound	0062.2	Fish dried and unsalted.....	3,324,826	$368,899
718 (b)	25% Ad Valorem	0067.5	Fish not in oil, etc., in airtight containers weighing with contents not more than 15 lbs. each....	1,214,997	$126,691
719 (5)	1¼c. per pound	0073.5	Fish pickled or salted in bulk or containers weighing with contents more than 15 lbs. ecah	724,927	$ 61,192

248. Analysing the foregoing groups for 1936 imports, the following is the dissection to countries in order of importance:—

Tariff Paragraph	*Class No.*	*Country*	*Per Cent*
717 (a)	0056.0	Mexico	83
		Canada	8
		Japan	4
		Other Countries	5
		Newfoundland	Nil
717 (b)	0060.0	Canada	92
		Iceland	4.4
		Japan	2.5
		Newfoundland	.9
		Other Countries	.2
717 (c)	0062.2	Norway	63.8
		Japan	29
		Mexico	2
		Canada	1.5
		Other Countries	3.7
		Newfoundland	Nil
718 (b)	0067.5	Japan	76.6
		Hong Kong	8.4
		Norway	5.3
		Canada	3
		Other Countries	6.7
		Newfoundland	Nil
719 (5)	0073.5	Japan	41.5
		Hong Kong	27
		Canada	13
		U. S. S. R.	10.5
		Newfoundland	.3
		Other Countries	7.7

249. With a view to ascertaining as far as possible what species of Atlantic fish are included in the above import groups and in the United States domestic landings of miscellaneous fish, careful enquiry was made at Boston and Gloucester, two of the principal ports of landing for United States domestic catch on the Atlantic coast, and for imports.

The landings alone in Boston of the United States domestic catch, total, in the miscellaneous or unspecified class:—

1931.....14,039,941 pounds
1935.....30,681,834 pounds
1936.....79,117,507 pounds

and the species in their order and quantitative importance were:—

1). Red or Rosefish marketed as Ocean Perch.
2). Flounder, Gray Sole and American Plaice.
3). Whiting often marked as Silver Hake.
4). Catfish.

250. There are of course numerous other species of fish landed but they are not in sufficient quantities to call for individual attention. Enquiries, however, show that all are used and marketed usually as fillets of fish.

SWORDFISH

251. The tariff rates on Fresh and Frozen Swordfish are as follows:—

Fresh Swordfish	1½ cents per pound
Frozen Swordfish	3 cents per pound

Description and Uses

252. The Swordfish is known as such because of its long swordlike beak. The average weight of the fish is given at 200 pounds and it is classed as a high price fish food.

253. Fishing takes place on the Atlantic Coast usually between the months of June and October and before landing their catches, the fishermen remove the head, fins and viscera.

254. When the fish are landed they are graded by the buyer as to size and quality, the latter being determined by the buyer making several cuts in the body. Purchases are then made according to the inspection. There is a distinction made between the large and small swordfish and a consequent price differential. The fish are then cut into pieces and forwarded to market packed in crushed ice, being intended for immediate sale and consumption. The centre cuts of both fish, small and large, fetch higher prices than the napes and the tails. Fish remaining over are usually frozen and held for sale when supplies are short.

255. Frozen fish when drawn upon for sale are thawed out by the retailer before being offered to the consumer, who generally cannot tell any difference between the fresh and the frozen product.

256. Information collected states that the Japanese frozen Swordfish can be distinguished by:—

(1) The style of cut at the nape.
(2) The packing. The fish are sewn in cotton cloth, covered by burlap and bound on the outside by rope to facilitate handling.

257. However, in the retail shop, due to the cutting of the fish into pieces, these marks cannot be distinguished by the consumer.

Production

258. The United States domestic catch can be divided as to approximately 77 per cent Atlantic catch and 23 per cent Pacific catch.

259. At the best of times a difficult fishery, fishing can only be carried on in fairly good weather.

260. The chief sources of imports are Canada, for fresh Swordfish, and Japan for frozen Swordfish.

261. The United States domestic fishermen and the Canadian fishermen fish practically in the same waters, although the United States domestic fishery usually starts in the New England waters earlier than the Canadian fishery off the coast of Nova Scotia. The success of this fishery is, according to information, dependent upon the abundance of mackerel, herring, etc., on which the Swordfish feed.

262. The larger part of the Canadian Swordfish catch is shipped to Boston and moves through the same channels of distribution as the United States domestic catch. This joint Atlantic coast production is the competitor to the Japanese frozen Swordfish and it can be therefore supposed that part of the United States domestic production of frozen Swordfish is of fish, originally of Canadian origin.

263. Whilst the United States domestic fishery and the Canadian fishery takes place between the months of June and October, the Japanese fishery usually begins in August and goes on until the end of the year. Exports from Japan commence towards the end of October and therefore do not come on the market until the larger part of the United States and the Canadian production of Swordfish has been disposed of.

The following table gives the statistics of:—

(1) United States total domestic production
(2) United States domestic landings at Boston.
(3) Imports from Canada.
(4) Imports from Japan.

No. *Country*	1931	1934	1935	1936
1. United States total domestic production....	3,945,054	3,748,000	3,629,000	Not available
2. United States domestic landings at Boston.. ..	1,505,429	1,289,770	2,024,675	1,216,515
3. Imports from Canada..	1,116,015	1,487,415	2,058,710	1,983,364
4. Imports from Japan.. ..	1,011,874	1,463,069	2,113,069	4,037,229

PART IV

STATISTICS OF FOREIGN TRADE AND IMPORTS INTO THE UNITED STATES

264. The world catch of all species of fish, according to the statistics available, indicates that it is approximately twenty-five billion pounds annually, represented by the following approximate percentages in the various countries:—

(1) Japan.... ....25 per cent
(2) Soviet Union.... ....17 per cent
(3) United States, United Kingdom, Norway.... ....10 per cent each
(4) Canada.... .... 4 per cent
(5) France, Germany, Spain, Newfoundland and Iceland.. .... 3 per cent each
(6) Other Countries.... .... 9 per cent

265. When reviewing the statistics of the catches of these countries it will be seen that, practically speaking, all of these countries except Canada, Iceland, Newfoundland and Norway are primarily engaged in producing fish for their respective home markets.

266. To the United States market the Canadian fisheries are of particular interest, not only because Canada is the chief source of imports into the United States, but because a large share of the United States domestic production comes from the high seas off the coast of Canada where vessels of the two countries draw upon the same source of supply. Although some Canadian vessels fish off the coast of the United States, a greater number of American vessels fish off the Canadian coast. Moreover, when the fisheries of the border lakes are considered they can also be classified as a common source of supply. The importance of this position has brought about a great deal of co-operation between the governments of the United States and Canada culminating in the appointment of the International Fisheries Commission which deals with questions affecting the fisheries belonging to both countries.

267. The Canadian fisheries have a relatively small home market for fish as compared with its total production. In addition to the consumption of fresh fish in the home market, and the export of fresh and frozen fish, there is an appreciable industry in the preserving of the catch by salting and canning. The chief salted product in Canada is the cod for which there is a world wide market, but a substantial proportion of the Canadian production is exported to the United States. Salmon is the only canned product put up in Canada on a large scale, but little if any of this pack is sent to the United States.

268. Iceland, Newfoundland and Norway also have a lack of substantial home markets, and must depend upon foreign markets but, whilst in Iceland and Newfoundland the fisheries are principally in connection with cod, in Norway there is a large sardine canning industry supplying the

world markets with a fancy pack put up by hand labour. No comparable product to this is prepared in the United States chiefly, it would seem, because of the large amount of hand labour as well as the high cost of olive oil which is due to the duty imposed upon it.

269. In reviewing the statistics of foreign trade into the United States during a five year period from 1931 to 1935, the annual imports averaged 263,442,000 pounds at a value of $18,628,000.00. The following table gives total imports and value per pound for the years 1933, 1935 and 1936, and the average is 295,587,500 pounds at a value of $21,766,000.

Fish: Summary of United States Imports:—

Year	*Imports*		
		Value	
	Quantity	*Total*	*Per Pound*
1933	249,356,612	$15,827,357.00	6.3. cents
1935	279,651,187	$19,910,604.00	7.1 cents
1936	357,754,483	$29,560,376.00	8.3 cents

270. Annual exports from the United States during the same period averaged, per annum, 92,000,000 pounds, valued at $9,125,000.00. These exports consist almost entirely of canned salmon and canned sardines, (pilchards).

271. The imports consist principally of canned herring and sardines, fresh and frozen fresh water fish, salted cod, salted herring, and canned tuna.

Item	1933	1935	1936
Canned Sardines and Herrings	$3,258,000.00	$4,253,000.00	$5,704,582.00
Fresh Water Fish (fresh & frozen)	2,646,000.00	3,833,000.00	4,433,298.00
Salted Cod	1,538,000.00	1,971,000.00	2,163,814.00
Salted Herring	1,340,000.00	1,785,000.00	1,815,700.00
Canned Tuna	1,969,000.00	1,207,000.00	1,078,709.00
Other Species	5,076,000.00	6,862,000.00	14,364,273.00
Total	$15,827,000.00	$19,911,000.00	$29,560,376.00

272. Divided into countries of origin, imports and value percentages are as follows for the years 1933, 1935 and 1936:—

FISH: Percentage of Total Imports into the United States, Supplied by each of the Principal Countries:

Country	Percentage of Total Imports					
	Quantity			*Value*		
	1933	1935	1936	1933	1935	1936
Canada	49.1%	53.0%	53.5%	39.8%	42.0%	43.7%
Norway	15.8%	15.6%	13.0%	17.0%	20.2%	16.1%
Japan	10.2%	6.9%	10.9%	16.1%	10.3%	17.9%
Newfoundland	7.5%	8.1%	9.3%	4.1%	4.3%	2.8%
Netherlands	3.8%	3.0%	3.3%	2.4%	2.4%	1.8%
United Kingdom	4.1%	3.7%	2.6%	4.7%	3.9%	2.9%
Portugal	2.1%	.9%	1.9%	3.5%	2.1%	3.8%
Soviet Union	1.1%	.9%	.9%	3.3%	3.1%	2.8%
Italy	.8%	1.0%	.8%	3.0%	4.1%	2.8%
Spain	1.2%	1.5%	.8%	2.1%	2.3%	.8%
Other Countries	4.3%	5.4%	3.0%	4.0%	5.3%	4.6%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

273. Total Quantity Imported:—357,754,483 pounds. Total Value:—29,560,376 dollars

	IMPORTS		VALUE		Average Price Per Pound
	Quantity	Per Cent	Value	Per Cent	
Canada	191,731,809	53.59	12,932,714	43.74	7.0 cents
Norway	53,210,117	12.95	4,754,203	16.08	9.0 cents
Japan	35,191,770	10.86	5,282,426	17.87	15.0 cents
Newfoundland	32,394,984	9.35	873,048	2.95	2.7 cents
Netherlands	9,994,733	3.29	533,004	1.80	5.3 cents
United Kingdom	9,475,729	2.64	787,564	2.66	8.3 cents
Portugal	6,846,026	1.96	1,120,197	3.78	16.0 cents
Soviet Union	3,175,814	.89	844,703	2.85	27.0 cents
Italy	2,631,110	.76	843,313	2.85	32.0 cents
Spain	2,508,092	.75	234,331	.78	9.3 cents
Other Countries	10,584,309	2.96	1,354,873	4.64	12.8 cents
Totals	357,744,493	100.00	29,560,376	100.00	8.26 cents

274. FISH: Cod and Related Species Salted.

Imports into United States.

Salted Cod, Haddock, Hake, Cusk.	1935		1936	
	Quantity Pounds	Value Dollars	Quantity Pounds	Value Dollars
Green Salted . .	37,417,033	1,461,281	52,359,316	1,537,784
Dry Salted	4,585,011	232,063	3,152,214	160,428
Boneless	2,512,556	285,014	2,475,519	239,463
Totals	44,514,600	1,978,358	57,987,049	1,937,675

PERCENTAGE DISTRIBUTION OF IMPORTS

Number	CLASS	1931		1936		Canada		Nfld.		Norway		Japan		Iceland		Others	
		Quantity per cent	Value per cent	Quantity per cent	Value per cent	Quantity per cent	Value per cent	Quantity per cent	Value per cent	Quantity per cent	Value per cent	Quantity per cent	Value per cent	Quantity per cent	Value per cent	Quantity per cent	Value per cent
1.	*Fresh or Frozen*																
	(a) Whole or beheaded or eviscerated or both	1.3	2.1	4.3	4.0	99.8	99.7	.....	.....	.....	.....	.....	.....	.....	.....	.2	.3
	(b) Fillet, skinned or boned	6.1	10.9	11.7	23.8	91.5	92.7	.8	.7	.....	.....	2.5	2.7	4.5	3.4	.7	.5
2.	*Dried unsalted but including other fish*	10.2	6.9	4.3	9.8	2.1	.9	.....	.....	63.7	56.9	.....	.....	.....	.....	34.2	42.2
3.	*Canned.* Cakes, Balls and Puddings	.5	1.8	2.5	3.6	.4	.6	.....	.....	68.2	62.3	30.9	35.5	.....	.....	.5	1.6
4.	*Pickled or Salted.*																
	(a) Green Salted	22.9	20.1	66.4	40.9	43.3	51.1	50.9	43.3	.....	.....	1.6	1.5	3.2	2.8	1.0	1.3
	(b) Dry Salted	49.9	45.8	4.0	4.2	67.1	62.5	4.1	3.1	6.7	10.0	17.1	17.5	.....	.....	5.0	6.9
	(c) Boneless	6.1	6.6	3.1	6.4	99.1	99.1	.4	.3	.1	.3	.3	.1	.....	.....	.1	.2
5.	*Smoked or Kippered.*																
	(a) Whole, beheaded or eviscerated or both	1.2	2.6	1.2	2.5	96.1	97.7	.....	.....	.....	.....	.....	.....	.....	.....	3.9	2.3
	(b) Fillet, skinned or boned	1.8	3.2	2.5	4.8	92.7	93.9	.....	.....	.....	.....	.....	.....	.....	.....	7.3	6.1
		100.0	100.0	100.0	100.0	The above are percentage caluculations for 1936 Imports.											

NOTE—No. 2 Dried—Unsalted Imports of Cod, Haddock, Hake, Pollock and Cusk were 22,527 pounds, totally supplied by

Landings and Imports

YEAR	SALTED (almost entirely Cod)				Landings of Fresh Fish by United States Vessels at Boston and Gloucester, Mass., and Portland, Maine, but principally all at Boston	
	Landings by United States Vessels at		Imports for Consumption	Domestic Exports		
	Boston and Gloucester, Mass., and Portland, Maine, but principally all Gloucester	Seattle and Anacortes, Wash., and San Francisco, California			Cod	Haddock
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
1895	43,799,000	2,456,000	4,706,000	11,281,000	24,071,000	41,578,000
1903	27,509,000	4,699,000	19,213,000	3,043,000	30,557,000	40,339,000
1913	16,506,000	4,754,000	29,236,000	4,484,000	29,177,000	53,436,000
1923	4,552,000	5,634,000	32,452,000	6,870,000	58,212,000	78,575,000
1931	1,309,000	3,351,000	38,946,000	2,067,000	59,348,000	132,845,000
1935	2,481,000	4,584,000	44,379,000	401,000	85,684,000	156,996,000
1936	not available	not available	57,987,000	not available	72,000,000 approx.	140,000,000 approx.

277. The import statistics for the years 1931, 1934, 1935 and 1936, covering quantities of fish and fish products landed in the United States and which hold interest for Newfoundland are detailed in the following pages. Modifications of tariff rates or classification numbers for the last statistical year, 1936, have been included. These lists are given so that at any time operators desirous of catering for any particular section of the trade will have competent information available upon which to base a study of the market.

UNITED STATES IMPORTS

SCHEDULE NO. 1 — FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH, FRESH OR FROZEN—WHOLE or BEHEADED, or EVISCERATED or BOTH

EELS — PARAGRAPH 717 (a)

Year.	1931		1934		1935		1936	
Class No.	0051.8		0051.8		0051.8		0048.8	
Rate of Duty.	1 cent per pound		1 cent per pound		1 cent per pound		½ cent per pound	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	356,693	26,746	487,127	22,418	403,428	23,230	504,042	28,958
Canada	350,623	25,211	484,855	22,254	398,627	22,601	496,992	28,267
Newfoundland	2,500	125	.....	.....	.....	.....	158	15
Other Countries	3,570	1,410	2,272	164	4,801	629	6,892	676

UNITED STATES IMPORTS

SCHEDULE NO. 2 — FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH, FRESH OR FROZEN—WHOLE or BEHEADED, or EVISCERATED or BOTH

SALMON — PARAGRAPH 717 (a)

Year.	1931		1934		1935		1936	
Class No.	0050.0		0050.0		0050.0		0050.0	
Rate of Duty.	2 cents per pound		2 cents per pound		2 cents per pound		1½ cents per pound	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	5,601,687	587,420	5,658,262	533,291	6,398,525	573,542	10,506,190	820,301
Canada	5,469,647	567,984	5,437,410	491,486	6,140,734	526,480	10,200,281	769,196
Newfoundland	52,738	8,760	3,246	310	50,175	12,045	4,496	819
Other Countries	79,302	10,712	217,606	41,495	207,616	35,013	301,504	50,286

SCHEDULE NO. 3 FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH, FRESH OR FROZEN—WHOLE or BEHEADED, or EVISCERATED or BOTH

COD, HADDOCK, HAKE, POLLOCK AND CUSK. PARAGRAPH 717 (a)

Year.	1931		1934		1935		1936	
Class No.	0052.0		0052.0		0052.0		0052.0	
Rate of Duty.	1 cents per pound		1 cent per pound		1 cent per pound		1 cent per pound	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	1,236,518	63,373	1,941,557	84,644	2,342,499	103,856	3,439,552	150,855
Canada	1,233,748	63,212	1,941,557	84,644	2,339,899	103,761	3,434,409	150,538
Newfoundland	.....	.....	.....	.....	.....	.....	200	16
Other Countries	2,770	161	.....	.....	2,600	95	4,943	301

UNITED STATES IMPORTS

SCHEDULE NO. 4 — FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH, FRESH OR FROZEN—WHOLE or BEHEADED, or EVISCERATED or BOTH

HALIBUT (FRESH) — PARAGRAPH 717 (a)

Year.	1931		1934		1935		1936	
Class No.	0053.0		0053.0		0053.0		0053.0	
Rate of Duty.	2 cents per pound		2 cents per pound		2 cents per pound		1 cent per pound	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	3,844,247	404,816	2,418,997	241,663	2,537,946	246,488	4,170,284	382,464
Canada	3,836,325	404,077	2,418,940	241,657	2,536,837	246,373	4,169,096	382,405
Newfoundland	7,672	720	57	6	.....	.....	.....	.....
Other Countries	250	19	.....	.....	1,109	115	1,188	59

SCHEDULE NO. 5 FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH, FRESH OR FROZEN—WHOLE or BEHEADED, or EVISCERATED or BOTH

HALIBUT (FROZEN) PARAGRAPH 717 (a)

Year.	1931		1934		1935		1936	
Class No.	0053.2		0053.2		0053.2		0053.2	
Rate of Duty.	2 cents per pound		2 cents per pound		2 cents per pound		1 cent per pound	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	254,011	35,564	368,398	29,977	164,093	13,862	904,147	75,468
Canada	248,357	34,497	203,198	18,801	82,493	6,982	738,347	66,415
Newfoundland	.....	.....	.....	.....	.....	.....	.....	.....
Other Countries	5,654	1,067	165,200	11,176	81,600	6,880	165,800	9,053

UNITED STATES IMPORTS

SCHEDULE NO. 6 — FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH, FRESH OR FROZEN—WHOLE or BEHEADED, or EVISCERATED or BOTH

MACKEREL — PARAGRAPH 717 (a)

Year.	1931		1934		1935		1936	
Class No.	0054.0		0054.0		0054.0		0054.0	
Rate of Duty.	2 cents per pound		2 cents per pound		2 cents per pound		2 cents per pound	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	1,826,546	90,421	238,880	12,677	118,687	6,325	451,291	21,225
Canada	1,820,876	90,054	238,880	12,677	117,576	6,283	450,805	21,188
Newfoundland	4,050	243	.....	.....	.....	.....	.....	.....
Other Countries	1,620	124	.....	.....	1,111	42	486	37

SCHEDULE NO. 7 — FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH, FRESH OR FROZEN—WHOLE or BEHEADED, or EVISCERATED or BOTH

SWORDFISH — PARAGRAPH 717 (a)

Year.	1931		1934		1935		1936—Fresh		1936—Frozen	
Class No.	0055.0		0055.0		0055.0		0055.3		0055.5	
Rate of Duty.	2 cents per pound		2 cents per pound		2 cents per pound		1½ cents per pound		3 cents per pound	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	2,127,889	207,417	2,950,484	334,993	4,185,126	383,849	1,870,828	371,942	4,154,582	293,267
Canada	1,116,015	139,537	1,487,415	228,090	2,058,710	232,847	1,858,837	371,252	124,527	20,034
Newfoundland ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Japan	1,011,874	67,880	1,463,069	106,843	2,113,403	149,721	7,174	593	4,030,055	273,233
Other Countries	.....	.....	.....	.....	13,013	1,281	4,817	97	.....	.....

SCHEDULE NO. 8 FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH, FRESH OR FROZEN—WHOLE or BEHEADED, or EVISCERATED or BOTH

FISH—NOT SPECIALLY PROVIDED FOR PARAGRAPH 717 (a)

Year.	1931		1934		1935		1936	
Class No.	0056.0		0056.0		0056.0		0056.0	
Rate of Duty.	1 cent per pound		1 cent per pound		1 cent per pound		1 cent per pound	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	2,556,657	205,424	2,540,811	109,449	4,028,998	131,429	5,044,403	183,910
Canada	480,218	35,453	73,215	4,408	202,325	12,171	407,973	22,963
Newfoundland	925	76	.....	.....	.....	.....	.....	.....
Mexico	1,781,122	122,403	2,186,225	75,847	3,674,721	99,943	4,189,360	120,997
Japan	119,372	12,877	96,118	9,691	93,650	7,154	204,028	15,657
Other Countries	175,021	34,615	285,253	19,503	58,302	12,161	243,042	24,293

SCHEDULE NO. 9 FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH, FRESH OR FROZEN; FILLET, SKINNED, BONED, SLICED OR DIVIDED

NOT SPECIALLY PROVIDED FOR PARAGRAPH 717 (b)

Year.	1931		1934		1935		1936	
Class No.	0060.0		0060.0		0060.0		0060.0	
Rate of Duty.	2½ cents per pound		2½ cents per pound		2½ cents per pound		2½ cents per pound	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	3,008,143	326,578	3,942,094	467,749	4,100,761	415,099	9,255,303	893,646
Canada	2,927,389	316,203	3,476,084	401,347	4,012,476	406,570	8,468,800	828,662
Newfoundland	225	25	.....	.....	3,300	377	80,289	6,500
Iceland	.....	.....	.....	.....	.....	.....	416,782	31,093
Japan	4,541	510	386,547	34,169	50,529	5,046	234,611	24,268
Other Countries	75,988	9,840	79,463	32,233	34,456	3,106	54,821	3,123

UNITED STATES IMPORTS

SCHEDULE NO. 10 — FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH—DRIED AND UNSALTED

COD, HADDOCK, HAKE, POLLOCK AND CUSK. — PARAGRAPH 717 (c)

Year.	1931		1934		1935		1936	
Class No.	0062.0		0062.0		0062.0		0062.0	
Rate of Duty.	2½ cents per pound		2½ cents per pound		2½ cents per puond		2½ cents per pound	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	2,400,218	229,811	40,098	3,523	48,018	3,301	22,137	1,092
Canada	188,220	21,999	22,376	2,037	43,180	2,923	22,049	1,084
Newfoundland	13,216	850	.....	.....	.....	.....	.....	.....
Norway	2,191,702	205,924	7,100	799	992	59	88	8
Other Countries	7,080	1,038	10,622	687	3,846	319	.....	.....

SCHEDULE NO. 11 — FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH—DRIED AND UNSALTED

OTHER. — PARAGRAPH 717 (c)

Year.	1931		1934		1935		1936	
Class No.	0062.2		0062.2		0062.2		0062.2	
Rate of Duty.	1¼ cents per pound		1¼ cents per pound		1¼ cents per pound		1¼ cents per pound	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	1,759,469	283,949	3,573,128	396,487	3,209,764	391,189	3,324,826	368,899
Canada	105,094	8,061	21,455	1,492	59,307	7,237	49,547	3,757
Newfoundland	280	13	.....	.....	1,500	179	265	29
Norway	144,344	15,263	2,178,614	230,446	1,852,574	215,791	2,120,302	209,512
Japan	1,247,897	203,842	1,161,295	115,318	1,045,756	114,708	973,753	117,220
Other Countries	261,854	56,770	211,764	49,231	250,627	53,274	180,959	38,381

UNITED STATES IMPORTS

SCHEDULE NO. 12 FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH, FRESH OR FROZEN—WHOLE or BEHEADED, or EVISCERATED or BOTH

SEA HERRING (FRESH) PARAGRAPH 1756

Year.	1931		1934		1935		1936	
Class No.	0059.0		0059.0		0059.0		0059.0	
Rate of Duty.	Free		Free		Free		Free	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	13,238,367	52,518	36,117,818	229,351	37,459,015	276,833	47,351,773	317,122
Canada	13,227,927	51,821	36,116,138	229,257	37,457,347	276,756	47,254,311	316,389
Newfoundland	700	63	.....	.....	.....	.....	16,400	87
Other Countries.....	9,740	634	1,680	94	1,668	77	81,062	646

SCHEDULE NO. 13 FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH, FRESH OR FROZEN—WHOLE or BEHEADED, or EVISCERATED or BOTH

SEA HERRING (FROZEN) PARAGRAPH 1756

Year.	1931		1934		1935		1936	
Class No.	0059.2		0059.2		0059.2		0059.2	
Rate of Duty.	Free		Free		Free		Free	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	2,917,543	91,451	2,079,890	60,550	1,979,033	58,079	2,535,159	70,732
Canada	2,909,443	91,005	2,016,485	58,747	1,739,480	51,231	2,264,205	68,541
Newfonudland	.....	.....	33,800	1,014	.....	.....	247,000	1,235
Other Countries	8,100	446	29,605	769	239,553	6,848	23,954	956

UNITED STATES IMPORTS

SCHEDULE NO. 14 — FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH, FRESH OR FROZEN—WHOLE or BEHEADED, or EVISCERATED or BOTH

SMELTS—WHETHER OR NOT WHOLE — PARAGRAPH 1756

Year.	1931		1934		1935		1936	
Class No.	0057.0		0057.0		0057.0		0057.0	
Rate of Duty.	Free		Free		Free		Free	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	6,640,047	840,349	5,271,782	624,464	7,086,162	736,458	8,611,650	848,271
Canada	6,256,848	787,829	5,144,799	605,400	6,776,519	703,275	8,341,204	816,994
Newfoundland..	282,026	35,708	102,273	1 7,277	146,693	19,465	172,735	24,710
Japan	.....	.....	24,656	1,787	161,950	13,603	94,711	6,227
Other Countries.....	101,173	16,812	.....	.....	1,000	115	3,000	340

SCHEDULE NO. 15 — FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH—FRESH OR FROZEN—WHETHER OR NOT WHOLE

TUNA FISH — PARAGRAPH 1756

Year.	1931		1934		1935		1936	
Class No.	0058.0		0058.0		0058.0		0058.0	
Rate of Duty.	Free		Free		Free		Free	
Cuontry.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	7,857,836	578,615	6,093,459	413,476	6,282,680	394,092	5,454,897	305,343
Canada	140,299	7,390	268,358	13,275	172,693	8,379	148,768	6,731
Newfoundland	.....	.....	.....	.....	.....	.....	.....	.....
Japan	6,811,586	529,937	5,733,203	396,329	5,687,987	364,867	4,676,068	274,374
Mexico	589,000	40,270	96,900	3,872	196,000	8,381	630,061	24,338
Other Countries	16,961	1,018	.....	.....	226,000	13,275	.....	.....

SCHEDULE NO. 16 FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH—Not in oil or oil and other substances—In airtight containers, weighing, with contents, not over 15 lbs. each.

SALMON PARAGRAPH 718 (b)

Year.	1931		1934		1935		1936	
Class No.	0067.1		0067.1		0067.1		0067.1	
Rate of Duty.	25 per cent		25 per cent		25 per cent		25 per cent	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	137,350	12,653	220,465	17,983	3,024,720	196,298	2,323,828	150,270
Canada	8,629	1,137	18,528	1,267	2,694,890	167,125	1,134,628	68,107
Newfoundland	670	109	.....	.....	.....	.....	.....	.....
Japan	127,295	11,331	201,865	16,698	329,830	29,173	1,186,727	81,641
Other Countries	756	76	72	18	.....	.....	2,473	522

SCHEDULE NO. 17 FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH—Not in oil or oil and other substances—In airtight containers, weighing, with contents, not over 15 lbs. each.

HERRING AND SARDINES PARAGRAPH 718 (b)

Year.	1931		1934		1935		1936	
Class No.	0067.2		0067.2		0067.2		0067.2	
Rate of Duty.	25 per cent		25 per cent		25 per cent		25 per cent	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	4,902,191	426,971	6,496,360	485,447	10,353,151	728,581	12,880,711	994,155
Canada	6,480	688	35	2	.....	.....	11,850	888
Newfoundland	.....	.....	.....	.....	.....	.....	.....	.....
Norway	3,064,445	233,600	4,651,346	308,373	8,560,919	536,772	10,627,609	746,476
United Kingdom	967,156	100,522	1,089,031	102,987	939,711	99,368	1,360,361	147,892
Italy	334,560	25,338	245,036	16,719	234,754	15,685	263,828	13,621
Sweden	216,226	29,595	205,793	24,712	277,288	37,109	348,622	46,084
Other Countries	313,324	37,228	305,119	32,654	340,479	39,697	268,441	39,194

SCHEDULE NO. 18 FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH—Not in oil or oil and other substances—In airtight containers, weighing, with contents, not over 15 lbs. each.

FISH CAKES, BALLS AND PUDDINGS PARAGRAPH 718 (b)

Year.	1931		1934		1935		1936	
Class No.	0067.3		0067.3		0067.3		0067.3	
Rate of Duty.	25 per cent		25 per cent		25 per cent		25 per cent	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	911,219	70,715	1,650,805	117,623	1,921,576	126,547	2,029,609	135,269
Canada	950	74	2,993	191	26,401	2,842	10,655	884
Newfoundland	.....	.....	.....	.....	.....	.....	.....	.....
Norway	724,699	52,482	1,030,536	70,013	1,371,658	83,576	1,384,911	84,927
Japan	177,086	17,428	615,322	47,289	518,479	39,583	628,729	48,893
Other Countries	8,484	731	1,952	130	5,038	546	5,314	565

SCHEDULE NO. 19 FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH—Not in oil or oil and other substances—In airtight containers, weighing, with contents, not over 15 lbs. each.

OTHER FISH PARAGRAPH 718 (b)

Year.	1931		1934		1935		1936	
Class No.	0067.5		0067.5		0067.5		0067.5	
Rate of Duty.	25 per cent		25 per cent		25 per cent		25 per cent	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	1,466,993	187,089	2,047,785	239,679	1,394,958	154,142	1,214,997	136,691
Canada	95,671	11,844	38,211	3,977	14,843	1,477	37,669	3,837
Newfoundland	.....	.....	.....	.....	.....	.....	.....	.....
Norway	284,120	25,231	120,238	10,174	83,969	7,198	65,899	5,509
United Kingdom	67,525	8,301	4,175	1,003	4,986	1,082	4,788	1,318
Japan	535,286	73,666	1,265,751	153,990	893,848	87,484	931,242	96,870
Other Countries	484,391	68,047	619,410	70,535	397,312	56,901	175,399	29,157

UNITED STATES IMPORTS

SCHEDULE NO. 20 FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH—Pickled or Salted—Not in Oil and not in airtight containers, weighing with contents, 15 pounds or less each.

SALMON PARAGRAPH NO. 719 (1)

Year.	1931		1934		1935		1936	
Class No.	0068.0		0068.0		0068.0		0068.0	
Rate of Duty.	25 per cent		25 per cent		25 per cent		20 per cent	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	640,593	66,356	1,220,561	182,235	498,068	60,653	265,113	29,460
Canada	431,737	49,185	1,176,445	179,320	470,204	58,441	220,003	26,020
Newfoundland	40,800	2,365	8,800	487	.....	.....	19,748	1,796
Japan	126,052	9,095	33,910	2,086	19,764	1,539	25,362	1,644
Other Countries	42,004	5,711	1,406	342	8,100	673	.....	.....

SCHEDULE NO. 21 FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH—Pickled or Salted—Not in Oil—and not in airtight containers, weighing, with contents, 15 pounds or less each

COD, HADDOCK, HAKE, POLLOCK, and CUSK. Neither skinned or boned except vertebral column may be removed. Containing not more than 43 per cent moisture by weight.

PARAGRAPH 719 (2)

Year.	1931		1934		1935		1936	
Class No.	0069.0		0069.0		0069.0		0069.0	
Rate of Duty.	1¼ cents per pound		1¼ cents per pound		1¼ cents per pound		1¼ cents per pound	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	23,350,117	1,367,042	6,303,454	342,219	4,458,568	225,079	3,152,214	160,428
Canada	14,076,393	867,215	3,754,201	209,873	3,045,305	149,674	2,115,976	100,477
Newfoundland	7,002,635	346,214	1,662,051	84,616	.....	.....	129,380	5,332
Norway	312,338	25,641	138,931	9,737	123,213	9,082	212,903	16,194
Japan	437,755	27,272	530,897	21,821	546,455	27,866	559,701	28,423
Other Countries	1,520,996	100,700	217,374	16,172	743,595	38,457	134,254	10,002

UNITED STATES IMPORTS

SCHEDULE NO. 22 — FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH—Pickled or Salted—Not in Oil—and not in airtight containers, weighing, with contents, 15 pounds or less each

COD, HADDOCK, HAKE, POLLOCK, and CUSK. Neither skinned or boned except vertebral column may be removed. Containing not more than 43 per cent moisture by weight.

PARAGRAPH 719 (2)

Year.	1931		1934		1935		1936	
Class No.	0069.2		0069.2		0069.2		0069.2	
Rate of Duty.	¾ cents per pound		¾ cent per pound		¾ cent per pound		¾ cent per pound	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	13,467,714	600,450	34,451,703	1,368,126	37,417,033	1,461,281	52,359,316	1,537,784
Canada	10,017,439	428,956	17,810,743	726,337	19,165,557	784,560	22,692,903	786,839
Newfoundland	3,114,666	156,360	15,328,660	601,482	16,841,447	643,487	26,699,134	666,028
Miquelon & St. Pierre	11,119	515	928,660	26,045	1,163,020	23,500	277,306	6,004
Iceland	304,032	13,679	22,046	1,240	.....	.....	1,668,865	44,011
Norway	.....	.....	5,200	382	27,081	1,804	30,242	2,011
Japan	.....	.....	215,575	5,280	146,970	3,666	879,629	24,898
Other Countries	20,458	940	140.819	7,360	72,958	4,264	311,237	7,993

SCHEDULE NO. 23 — FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH—Pickled or Salted—Not in Oil and not in airtight containers, weighing with contents, 15 pounds or less each.

COD, HADDOCK, HAKE, POLLOCK AND CUSK—SKINNED OR BONED. PARAGRAPH 719 (3)

Year.	1931		1934		1935		1936	
Class No.	0069.9		0069.9		0069.9		0069.9	
Rate of Duty.	2 cents per pound		2 cents per pound		2 cents per pound		2 cents per pound	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	2,128,359	197,579	2,381,563	188,860	2,502,997	284,474	2,475,519	239,463
Canada	2,124,239	197,150	2,378,579	188,628	2,451,878	279,696	2,453,208	237,803
Newfoundland	324	21	.....	.....	.....	.....	10,800	929
Norway	2,628	342	484	57	5,930	492	3,784	324
Japan	.....	.....	2,500	175	42,445	4,012	7,595	388
Other Countries	1,168	66	.....	.....	2,744	274	132	19

UNITED STATES IMPORTS

SCHEDULE NO. 24 — FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH—Pickled or Salted—Not in Oil and not in airtight containers, weighing with contents, 15 pounds or less each.
HERRING IN CONTAINERS, containing not more than 10 pounds of herring. — PARAGRAPH 719 (4)

Year.	1931		1934		1935		1936	
Class No.							0071.4	
Rate of Duty.							¾ cent per pound	
Country.	Pounds	$ Value	Pounds	$ Value			Pounds	$ Value
Toatls.							7,795,550	407,286
Canada	.....	.....	.....	.....	.....	.....	167,314	7,691
Newfoundland	.....	.....	.....	.....	.....	.....	.....	.....
Netherlands	.....	.....	.....	.....	.....	.....	7,481,231	393,061
Norway	.....	.....	.....	.....	.....	.....	62,139	1,695
Other Countries	.....	.....	.....	.....	.....	.....	84,866	4,839

NOTE—New classification and rate of duty as from February 1st, 1936.

SCHEDULE NO. 25 FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH—Pickled or Salted—Not in Oil and not in airtight containers, weighing with contents, 15 pounds or less each.
HERRING in bulk or in contaniers weighing, with contents more than 15 pounds each. PARAGRAPH 719 (4)

Year.	1931		1934		1935		1936	
Class No.	0071.0		0071.0		0071.0		0071.5	
Rate of Duty.	1 cent per pound		1 cent per pound		1 cent per pound		1 cent per pound	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	41,562,791	2,573,487	31,807,838	1,593,158	33,409,116	1,783,316	29,875,979	1,408,414
Canada	2,881,088	122,905	3,543,561	102,402	2,439,066	87,943	3,108,329	112,814
Newfoundland	3,609,135	148,466	3,877,073	142,856	5,437,589	190,248	4,823,345	138,865
Iceland	1,127,018	46,885	2,791,744	154,897	924,570	55,999	1,903,138	78,808
Netherlands	8,668,532	419,781	8,130,322	416,156	8,201,116	452,406	2,335,599	124,089
Norway	2,214,419	65,800	2,542,216	74,610	4,276,805	179,378	8,313,778	309,089
Sweden	563,827	24,345	2,015,422	93,775	2,191,869	131,673	2,448,221	114,253
United Kingdom	21,105,137	1,616,283	7,893,563	496,958	7,975,977	521,178	5,967,553	450,012
Other Countries	1,393,635	129,022	1,013,927	111,504	1,962,124	164,491	976,016	80,484

SCHEDULE NO. 26 FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH—Pickled or Salted—Not in Oil and not in airtight containers, weighing with contents, 15 pounds or less each.
MACKEREL—In bulk or in containers, weighing, with contents, more than 15 lbs. each. PARAGRAPH 719 (4)

Year.	1931		1934		1935		1936	
Class No.	0072.0		0072.0		0072.0		0072.0	
Rate of Duty.	1 cent per pound		1 cent per pound		1 cent per pound		1 cent per pound	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	6,726,970	312,742	3,848,037	188,901	3,780,642	199,334	4,868,976	256,061
Canada	1,436,921	91,667	1,398,230	65,017	596,997	35,288	1,202,090	60,405
Newfoundland	18,000	805	40,000	550	7,000	210	220	88
Irish Free State	2,593,400	88,906	149,006	6,494	622,200	27,695	648,200	33,626
United Kingdom	645,760	33,088	.....	.....	183,341	6,770	415,700	25,548
Sweden	439,377	17,120	30,000	903	175,710	4,541	486,931	15,403
Norway	1,459,231	71,378	2,167,904	108,522	1,839,647	99,302	2,050,249	113,589
Other Countries	134,261	9,778	64,897	7,415	355,647	25,528	65,586	7,402

SCHEDULE NO. 27 — FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH—Not in oil—Pickled or Salted—in bulk or in containers, weighing, with contents, more than 15 pounds each.

NOT SPECIALLY PROVIDED FOR — PARAGRAPH 719 (5)

Year.	1931		1934		1935		1936	
Class No.	0073.0		0073.0		0073.0		0073.0	
Rate of Duty.	1¼ cents per pound		1¼ cents per pound		1¼ cents per pound		1¼ cents per pound	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	1,590,668	142,217	954,248	75,907	765,283	71,438	725,495	61,192
Canada	149,965	9,813	56,366	2,920	88,581	5,239	95,732	6,368
Newfoundland	19,863	1,205	2,300	59	2,940	211	2,000	131
U. S. S. R.	280,130	36,002	172,366	17,936	91,694	10,810	76,612	10,627
Japan	663,323	34,822	445,666	19,192	326,120	16,284	272,558	14,810
Other Countries	477,387	60,375	277,550	35,800	255,948	38,894	278,693	29,256

SCHEDULE NO. 28 FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH—Smoked and Kippered—Not in oil, etc., and not in airtight containers, weighing, with contents, 15 lbs or less

SALMON PARAGRAPH 720 (a) [1]

Year.	1931		1934		1935		1936	
Class No.	0074.0		0074.0		0074.0		0074.0	
Rate of Duty.	25 per cent		25 per cent		25 per cent		25 per cent	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	4,278	1,622	4,463	1,652	1,654	795	34,474	10,717
Canada	156	50	2,154	563	124	355	3,571	936
Newfoundland	.....	.....	.....	.....	.....	.....	4,000	325
Japan	.....	.....	140	20	125	34	26,469	9,019
United Kingdom	905	720	184	199	375	386	434	437
Other Countries	3,217	852	1,985	870	30	20	.....	.....

SCHEDULE NO. 29 — FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH—Smoked and Kippered-Not in oil, etc., and not in airtight containers, weighing, with contents, 15 lbs. or less ea.

HERRING—WHOLE OR BEHEADED — PARAGRAPH 720 (a) [4]

Year.	1931		1934		1935		1936 Hard Dry Smoked		1936 Other	
Class No.	0074.1		0074.1		0074.1		0075.1		0075.2	
Rate of Duty.	1¼ cents per pound		1¼ cents per pound		1¼ cents per pound		⅝ cent per pound		1¼ cents per pound	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals	1,185,551	59,086	889,381	34,476	2,003,118	64,908	1,817,824	52,821	345,633	29,175
Canada	837,233	30,707	701,862	19,748	1,271,220	38,494	1,055,982	27,815	46,273	2,843
Newfoundland	85,065	7,363	41,954	1,598	150,624	2,834	.....	.....	1,600	208
Netherlands	22,485	1,175	19,578	1,168	32,428	2,129	45,549	2,635	19,260	1,131
Norway	47,545	2,184	13,442	650	459,693	12,587	688,416	19,984	137,381	11,810
United Kingdom	80,326	6,343	23,540	2,048	19,449	1,388	16,652	1,111	78,078	6,078
Germany	69,918	6,990	84,467	8,977	68,230	7,348	11,225	1,276	61,644	6,954
Other Countries	42,979	4,324	4,538	287	1,474	108	.....	.....	1,397	151

SCHEDULE NO. 30 FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH—Smoked and Kippered—Not in oil, etc., and not in airtight containers, weighing, with contents, 15 lbs or less

HERRING—BONED, WHETHER OR NOT SKINNED PARAGRAPH 720 (a) [3]

Year.	1931		1934		1935		1936	
Class No.							0075.3	
Rate of Duty.							1½ cents per pound	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.							371,678	28,954
Canada	No classification		No classification		No classification		281,626	21,730
United Kingdom							86,411	6,947
Netherlands							3,641	277

SCHEDULE NO. 31 FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH--Smoked and Kippered-Not in oil, etc., and not in airtgiht containers, weighing, with contents, 15 lbs. or less ea.

HERRING—Eviscerated, Split, Skinned or Divided (not boned) PARAGRAPH 720 (a) [3]

Year.	1931		1934		1935		1936	
Class No.	0074.2		0074.2		0074.2		0075.4	
Rate of Duty.	3 cents per pound		3 cents per pound		3 cents per pound		3 cents pr pound	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	859,537	80,902	737,005	69,071	1,122,600	100,104	876,515	74,336
Canada	118,416	9,844	102,168	9,144	278,866	23,929	113,559	10,759
Newfoundland..	3,000	169	1,695	88	3,450	321	32	3
United Kingdom	733,433	70,572	631,308	59,755	810,401	73,114	733,191	61,095
Other Countries	4,688	317	1,834	84	29,883	2,740	29,733	2,479

SCHEDULE NO. 32 FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH—Smoked and Kippered-Not in oil, etc., and not in airtight containers, weighing, with contents, 15 lbs. or less ea.

COD, HADDOCK, HAKE, POLLOCK AND CUSK. Whole or Beheaded or Eviscerated or both.

PARAGRAPH 720 (a) [4]

Year.	1931		1934		1935		1936	
Class No.	0074.4		0074.4		0074.4		0075.5	
Rate of Duty.	2½ cents per pound		2½ cents per pound		2½ cents per pound		2½ cents per pound	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	847,393	76,547	715,151	66,966	750,180	70,777	928,304	92,767
Canada	725,705	64,815	700,473	65,644	733,935	69,301	893,474	90,161
Newfoundland	.....	.....	.....	.....	.....	.....	.....	.....
Norway	74,506	8,274	.....	.....	.....	.....	.....	.....
United Kingdom	46,547	3,364	14,538	1,307	16,245	1,476	34,590	2,588
Other Countries	635	94	140	15	.....	.....	240	18

SCHEDULE NO. 33 FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH—Smoked and Kippered-Not in oil, etc., and not in airtight containers, weighing, with contents, 15 lbs. or less ea.

COD, HADDOCK, HAKE, POLLOCK AND CUSK. Filleted, Skinned, Boned, Sliced or Divided.

PARAGRAPH NO. 720 (a) [5]

Year.	1931		1934		1935		1936	
Class No.	0074.5		0074.5		0074.5		0075.6	
Rate of Duty.	3 cents per pound		3 cents per pound		3 cents per pound		3 cents per pound	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	834,715	96,040	1,107,072	118,332	1,319,396	131,568	1,830,189	181,978
Canada	793,230	91,878	987,002	104,926	1,250,543	124,179	1,697,750	170,567
Newfoundland	27	3	10,770	1,427	.....	.....	200	13
United Kingdom.... ..	40,915	3,495	109,300	11,979	68,765	7,376	132,239	11,398
Other Countries	543	664	.....	.....	88	13	.....	.....

SCHEDULE NO. 34 FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH—Smoked and Kippered-Not in oil, etc., and not in airtight containers, weighing, with contents, 15 lbs. or less ea.

NOT SPECIALLY PROVIDED FOR. PARAGRAPH 720 (a) [6]

Year.	1931		1934		1935		1936	
Class No.	0074.9		0074.9		0074.9		0075.9	
Rate of Dnty.	25 per cent		25 per cent		25 per cent		25 per cent	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	137,407	14,734	28,699	1,819	11,358	817	18,443	1,160
Canada	31,108	2,972	1,859	151	195	21	1,108	145
Newfoundland	30	4	.....	.....	.....	.....	.....	.....
United Kingdom	67,091	6,924	.....	.....	2,573	325	.....	.....
Norway	15,252	1,070	26,840	1,668	8,590	471	17,335	1,015
Other Countries	23,926	3,764	.....	.....	.....	.....	.....	.....

SCHEDULE NO. 35 FISH AND FISH PRODUCTS (EXCEPT SHELL FISH)

FISH—Prepared or Preserved—In bulk or in containers, weighing, with contents, more than 15 pounds each.

NOT SPECIAALY PROVIDED FOR PARAGRAPH 720 (b)

Year.	1931		1934		1935		1936	
Class No.	0078.2		0078.2		0078.2		0078.2	
Rate of Duty.	1¼ cents per pound		1¼ cents per pound		1¼ cents per pound		1¼ cents per pound	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	90,437	9,528	152,184	12,770	651,284	39,640	336,733	23,812
Canada	13,338	1,053	125,717	8,356	633,876	37,827	306,200	19,902
Newfoundland	4,000	198	.....	.....	.....	.....	400	16
Japan	29,386	3,219	17,866	1,474	15,978	1,207	17,748	1,181
Other Countries	43,713	5,058	8,601	2,940	1,430	606	12,385	2,713

UNITED STATES IMPORTS

SCHEDULE NO. 36 — SHELLFISH AND PRODUCTS

LOBSTERS, (including Spinny Lobsters and Crawfish) NOT CANNED — PARAGRAPH 1761

Year.	1931		1934		1935		1936	
Class No.	0083.0		0083.0		0083.0		0083.0	
Rate of Duty.	Free		Free		Free		Free	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	9,983,824	2,171,337	10,158,388	1,894,931	10,020,039	2,100,185	11,121,533	2,487,211
Canada	8,823,442	2,031,477	8,989,954	1,785,574	8,363,914	1,950,478	8,812,361	2,207,519
Newfoundland	9,919	3,684	.....	.....	340	90	766	456
Mexico	1,071,560	124,451	843,766	97,516	936,334	99,640	934,353	113,216
Br. West Indies	.....	.....	285,202	8,800	491,389	16,743	572,348	22,047
South Africa	.....	.....	1,020	255	131,595	19,850	574,198	101,112
Cuba	75,502	10,636	37,905	2,555	76,554	10,007	161,778	31,905
Other Countries	3,401	1,089	541	231	19,913	3,377	65,729	10,956

SCHEDULE NO. 37 — SHELLFISH AND PRODUCTS

LOBSTERS, (including Spinny Lobsters and Crawfish) CANNED — PARAGRAPH 1761

Year.	1931		1934		1935		1936	
Class No.	0084.0		Free		0084.0		0084.0	
Rate of Duty.	Free		Free		Free		Free	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	1,702,721	820,144	918,293	469,279	897,637	410,843	864,915	470,822
Canada	1,648,818	800,004	830,967	440,149	636,697	331,182	683,507	413,995
Newfoundland..	22,390	9,969	9,430	5,142	4,220	1,874	16,675	7,893
Cuba	1,640	820	63,631	19,539	104,122	37,320	106,741	31,147
South Africa.....	21,760	7,116	13,673	4,185	116,707	30,697	48,810	14,149
Other Countries	8,113	2,235	592	264	35,891	9,770	9,182	3,638

SCHEDULE NO. 38 — SHELLFISH AND PRODUCTS

NOT SPECIALLY PROVIDED FOR — PARAGRAPH 1761

Year.	1931		1934		1935		1936	
Class No.	0085.5		0085.5		0085.5		0087.7	
Rate of Duty.	Fere		Free		Free		Free	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	4,140,719	569,360	3,919,713	386,817	4,487,156	521,821	3,513,431	451,137
Canada....	164,039	4,457	98,240	4,990	68,564	3,618	113,523	8,093
Newfoundland..	16,545	2,641	21,912	3,593	160,010	18,159	150,044	14,465
Japan..	718,392	141,966	859,321	81,444	1,197,665	116,595	830,382	102,818
Mexico....	2,291,604	246,166	2,515,955	207,588	2,432,052	278,799	1,636,267	223,035
Other Countries..... ...	950,139	174,130	424,285	89,202	628,865	104,650	783,215	102,726

SCHEDULE NO. 39 — SHELLFISH AND PRODUCTS

SCALLOPS — PARAGRAPH 1761

Year.	1931		1934		1935		1936 Fresh but not frozen		1936 Other	
Class No.	0085.2		0085.2		0085.2		0087.3		0087.4	
Rate of Duty.	Free		Free		Free		Free		Free	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	153,427	24,382	867,576	131,360	1,455,011	209,905	1,363,794	235,573	1,288,781	159,364
Canada	121,586	18,400	584,151	103,569	798,104	141,968	1,200,644	216,378	63,876	12,072
Newfoundland	.....	.....	890	30	.....	.....	.....	.....	6,090	1,350
Japan	31,841	5,982	258,841	25,994	656,502	67,869	157,060	17,845	1,207,115	145,310
Other Countries	.....	.....	23,694	1,767	405	68	.....	.....	17,790	1,982

UNITED STATES IMPORTS

SCHEDULE NO. 40 — SHELLFISH AND PRODUCTS

CLAMS, QUAHAUGS not in airtight containers — PARAGRAPH 1761

Year.	1931		1934		1935		1936	
Class No.	0085.0		0085.0		0085.0		0087.0	
Rate of Duty.	Free		Free		Free		Free	
Country.	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value	Pounds	$ Value
Totals.	3,145,645	64,547	1,512,721	25,567	5,702,244	76,876	4,529,718	60,841
Canada	3,093,114	60,392	1,473,976	23,328	5,662,018	74,756	4,475,155	56,880
Newfoundland	15,760	335	.....	.....	.....	.....	13,703	2,375
St. Pierre, Miquelon	.....	.....	.....	.....	.....	.....	13,950	93
Japan	30,545	3,536	26,578	1,930	22,088	1,270	22,510	1,393
Other Countries	6,226	244	12,167	209	20,138	850	4,400	100

PART V.

UNITED STATES IMPORT TARIFF

278. In the following pages, full and detailed information is given in regard to the United States tariff phraseology and rates of duty. This detailed statement includes all modifications authorised up to the time of this survey and has been prepared in a manner to form a ready reference.

279. The basic law covering the United States tariff is Public Law No. 361, entitled the "Tariff Act of 1930" and approved under date of June 17th, 1930.

Paragraph No.	*Article*	*Class No.*	*Rate of Duty* (3) *See Notes*	*Notes*
717 (a)	FISH—*Fresh or Frozen.*			(1) Imports from Colonies of the United States of America are subject to special tariff.
	Whole or Beheaded or Evicerated or both			
	Fresh Water Fish. n.e.s.			
"	Whitefish.	0047.0	Threequarters cent per lb.	
"	Yellow Pike.	0047.1	Threequarters cent per lb.	
"	Jacks or Grass Pike.	0047.2	Threequarters cent per lb.	
"	Lake Trout.	0047.3	Threequarters cent per lb.	(2) Imports from CUBA are subject to special reductions in tariff under terms of Reciprocal Trade Agreement dated 1 September 1936.
"	Yellow Perch.	0047.4	One cent per lb.	
"	Tullibees.	0048.0	Threequarters cent per lb.	
"	Lake Herring and Ciscoes.	0048.1	One cent per lb.	
"	Chubs.	0048.2	Threequarters cent per lb.	
"	Mullet.	0048.3	Threequarters cent per lb.	
"	Saugers.	0048.4	Threequarters cent per lb.	
"	Not specially provided for.	0048.7	One cent per lb.	
"	Eels.	0048.8	Half cent per lb.	(3) Tariff as specified in this list is applicable to all imports as from the 1st of January 1937.
"	Salmon.	0050.0	One and half cents per lb.	
"	Cod, Haddock, Hake, Pollock and Cusk	0052.0	One cent per lb.	
"	Halibut (Fresh)	0053.0	One cent per lb.	
"	Halibut (Frozen).	0053.2	One cent per lb.	

Paragraph No.	*Article*	*Class No.*	*Rate of Duty* (3) *See Notes*	*Notes*
717 (a)	Mackerel.	0054.0	Two cents per lb.	(1) Imports from Colonies of the United States of America are subject to special tariff.
"	Sturgeon.	0055.2	One cent per lb.	
"	Swordfish (Fresh)	0055.3	One and half cents per lb.	
"	Swordfish (Frozen). Naturally or Artfiicially.	0055.4	Three cents per lb.	
"	Fish:—Not specially provided for.	0056.0	One cent per lb.	(2) Imports from CUBA are subject to special reductions in tariff under terms of Reciprocal Trade Agreement dated 1 September 1936.
717 (b)	FISH—*Fresh or Frozen.*			
"	Fillet, Skinned, Boned, Sliced or divided, not specially provided for.	0060.0	Two and half cents per lb.	
717 (c)	FISH—*Dried and Unsalted.*			
"	Cod, Haddock, Hake, Pollock	0062.0	Two and half cents per lb.	
"	Other.	0062.2	One and one quarter cents per lb.	
718 (a)	FISH—*In oil or in oil and other substances.*			(3) Tariff as specified in this list is applicable to all imports as from the 1st of January 1937.
"	Sardines—Valued not over 9 cents per pound.	0063.2	Forty-four per cent Ad. Valorem.	
"	Sardines—Valued over 9 cents per pound.	0063.3	Thirty per cent Ad. Valorem.	

Paragraph No.	*Article*	*Class No.*	*Rate of Duty* (3) *See Notes*	*Notes*
718 (a)	Anchovies—Valued not over 9 cents per pound.	0064.2	Forty-four per cent Ad. Valorem	(1) Imports from Colonies of the United States of America are subject to special tariff.
"	Anchovies—Valued over 9 cents per pound.	0064.3	Thirty per cent Ad. Valorem.	
"	Tuna Fish.	0065.2	Forty-five per cent Ad. Valorem.	(2) Imports from CUBA are subject to special reductions in tariff under terms of Reciprocal Trade Agreement dated 1 September 1936.
"	Antipasto Fish—Valued not over 9 cents per pound.	0066.2	Forty-four per cent Ad. Valorem.	
"	Antipasto Fish—Valued over 9 cents per pound.	0066.3	Thirty per cent Ad. Valorem.	
"	Other Fish—Valued not over 9 cents per pound.	0066.6	Forty-four per cent Ad. Valorem.	(3) Tariff as specified in this list is applicable to all imports as from the 1st of January 1937.
"	Other Fish—Valued over 9 cents per pound.	0066.7	Thirty per cent Ad. Valorem.	

Paragraph No.	*Article*	*Class No.*	*Rate of Duty* (3) *See Notes*	*Notes*
718 (b)	FISH—*Not in oil or in oil and other substances. In air-tight containers weighing, with contents, not over 15 pounds each.*			(1) Imports from Colonies of the United States of America are subject to special tariff.
"	Anchovies.	0067.0	Twenty-five per cent Ad. Valorem.	(2) Imports from CUBA are subject to special reductions in tariff under terms of Reciprocal Trade Agreement dated 1 September 1936.
"	Salmon.	0067.1	Twenty-five per cent Ad. Valorem.	
"	Herring and Sardines.	0067.2	Twenty-five per cent Ad. Valorem.	
"	Fish Cakes, Balls and Puddings.	0067.3	Twenty-five per ecnt Ad. Valorem.	(3) Tariff as specified in this list is applicable to all imports as from the 1st of January 1937.
"	Other.	0067.5	Twenty-five per cent Ad. Valorem.	

Paragraph No.	*Article*	*Class No.*	*Rate of Duty* (3) *See Notes*	*Notes*
719	FISH—*Pickled or Salted—Not in oil, etc., and not in air-tight containers weighing, with contents, 15 pounds or less each.*			(1) Imports from Colonies of the United States of America are subject to special tariff.
(1)	Salmon.	0068.0	Twenty per cent Ad. Valorem.	
" (2)	Cod, haddock, hake, pollock and cusk, neither skinned or boned (except that the vertebral column may be removed).			(2) Imports from CUBA are subject to special reductions in tariff under terms of Reciprocal Trade Agreement dated 1 September 1936.
	Containing not more than 43 per cent moisture by weight.	0069.0	One and quarter cents per lb.	
	Containing more than 43 per cent moisture by weight.	0069.2	Threequarter cent per lb.	
" (3)	Cod, haddock, hake, pollock, and cusk, skinned or boned.	0069.9	Two cents per lb.	(3) Tariff as specified in this list is applicable to all imports as from the 1st of January 1937.
" (4)	Herring, in containers (not air-tight) weighing, with contents, not more than 15 pounds each.	0071.2	Twenty-five per cent Ad. Valorem.	

Paragraph No.	*Article*	*Class No.*	*Rate of Duty* (3) *See Notes*	*Notes*
719 (4)	Herring—In bulk or in containers weighing, with contents, more than 15 pounds each.			(1) Imports from Colonies of the United States of America are subject to special tariff.
	In containers containing not more than 10 pounds of herring	0071.4	Threequarter cent per lb.	
	Other.	0071.5	One cent per lb.	(2) Imports from CUBA are subject to special reductions in tariff under terms of Reciprocal Trade Agreement dated 1 September 1936.
" (4)	Mackerel—In bulk or in containers weighing, with contents, more than 15 pounds each.	0072.0	One cent per lb.	
" (4)	Mackerel—In containers (not air-tight) weighing, with contents, not more than 15 pounds each	0072.2	Twenty-five per cent Ad. Valorem.	
" (5)	Alewives—In bulk or in containers, weighing with contents, more than 15 pounds each.	0073.3	Threequarter cent per lb.	(3) Tariff as specified in this list is applicable to all imports as from the 1st of January 1937.

Paragraph No.	*Article*	*Class No.*	*Rate of Duty* (3) *See Notes*	*Notes*
719 (5)	Fish—Pickled or Salted, not specially provided for. In bulk or in containers weighing, with contents, more than 15 pounds each.	0073.5	One and quarter cents lb.	(1) Imports from Colonies of the United States of America are subject to special tariff.
" (5)	Fish—Pickled or Salted, not specially provided for. In containers, (not airtight) weighing, with contents, not more than 15 pounds each.	0073.9	Twenty-five per cent Ad. Valorem.	(2) Imports from CUBA are subject to special reductions in tariff under terms of Reciprocal Trade Agreement dated 1 September 1936.
720 (a)	FISH—*Smoked or Kippered, not in oil, etc., and not in air tight containers, weighing with contents, 15 pounds or less each.*			
" (1)	Salmon.	0075.0	Twenyt-five per cent Ad. Valorem.	(3) Tariff as specified in this list is applicable to all imports as from the 1st of January 1937.
" (2)	Herring—Whole or beheaded. Hard Dry Smoked.	0075.1	Five-eights cents per lb.	
	Other.	0075.2	One and one quarter cents per lb.	

Paragraph No.	*Article*	*Class No.*	*Rate of Duty* (3) *See Notes*	*Notes*
720 (a) (3)	Herring—Boned, whether or not skinned.	0075.3	One and half cents per lb.	(1) Imports from Colonies of the United States of America are subject to special tariff.
	Herring—Eviscerated, Split, Skinned or Divided but not boned.	0075.4	Three cents per lb.	
" (4)	Cod, Haddock, Hake, Pollock and Cusk. Whole or beheaded or eviscerated or both.	0075.5	Two and half cents per lb.	(2) Imports from CUBA are subject to special reductions in tariff under terms of Reciprocal Trade Agreement dated 1 September 1936.
" (5)	Filleted, skinned, boned, sliced or divided.	0075.6	Three cents per lb.	
" (6)	Fish—Not specially provided for.	0075.9	Twenty-five per cent Ad. Valorem.	
720 (b)	FISH—*Prepared or Preserved, not specially provided for.*			(3) Tariff as specified in this list is applicable to all imports as from the 1st of January 1937.
"	In containers weighing, with contents, not more than 15 pounds each.	0078.0	Twenty-five per cent Ad. Valorem.	

Paragraph No.	*Article*	*Class No.*	*Rate of Duty* (3) *See Notes*	*Notes*
720 (b)	In bulk or in containers, weighing, with contents, more than 15 pounds each.	0078.2	One and quarter cents per lb.	(1) Imports from Colonies of the United States of America are subject to special tariff.
721	SHELLFISH AND PRODUCTS.			
" (a)	Crab Meat, Crab Sauce and Crab Paste.	0080.0	Fifteen per cent Ad. Valorem.	(2) Imports from CUBA are subject to special reductions in tariff under terms of Reciprocal Trade Agreement dated 1 September 1936.
" (a)	Oysters, Oyster Juice, or either. In combination with other substances, in air-tight ....containers (including weight of immediate container).	0080.1	Eight cents per lb.	
" (b)	Razor Clams, canned.	0080.4	Fifteen per cent Ad. Valorem.	(3) Tariff as specified in this list is applicable to all imports as from the 1st of January 1937.
" (b)	Clams (except Razor Clams) and Clams in combination with other substances (except Clam Chowder).	0081.5	Thirty-five per cent Ad. Valorem.	

Paragraph No.	*Article*	*Class No.*	*Rate of Duty* (3) *See Notes*	*Notes*
721 (b)	Clam Chowder, Clam Juice, and Clam Juice in combination with other substances.	0081.6	Thirty-five per cent Ad. Valorem	(1) Imports from Colonies of the United States of America are subject to special tariff.
" (c)	FISH PASTE AND FISH SAUCE.	0078.5	Thirty per cent Ad. Valorem.	(2) Imports from CUBA are subject to special reductions in tariff under terms of Reciprocal Trade Agreement dated 1 September 1936.
" (d)	CAVIAR AND OTHER FISH ROE.			
	Not boiled, etc.—Sturgeon.	0079.0	Thirty per cent Ad. Valorem.	
	Not boiled, etc.—Fish roe, not specially provided for.	0079.2	Twenty per cent Ad. Valorem	
	Boiled, packed in airtight containers.	0079.5	Thirty per cent Ad. Valorem.	
1756	FISH—*Fresh or Frozen, whether or not whole*			(3) Tariff as specified in this list is applicable to all imports as from the 1st of January 1937.
	Smelts.	0057.0	FREE	
	Tuna Fish.	0058.0	FREE	
	Sea Herring—Fresh.	0059.0	FREE	
	Sea Herring—Frozen.	0059.2	FREE	

Paragraph No.	*Article*	*Class No.*	*Rate of Duty* (3) *See Notes*	*Notes*
1761	LOBSTERS—(*Including spiny lobsters and crawfish*).			(1) Imports from Colonies of the United States of America are subject to special tariff.
	Not Canned.	0083.0	FREE	
	Canned.	0084.0	FREE	
"	CRABS—Fresh or Frozen (not crab meat).	0086.4	FREE	
	Prepared or Preserved, not specially provided for.	0086.5	FREE	(2) Imports from CUBA are subject to special reductions in tariff under terms of Reciprocal Trade Agreement dated 1 September 1936.
"	CLAMS—Quahaugs, not in airtight containers.			
	Fresh or Frozen.	0087.0	FREE	
	Prepared or preserved not specially provided for.	0087.1	FREE	
"	SHRIMPS AND PRAWNS.	0087.2	FREE	
"	SCALLOPS—Fresh but not frozen.	0087.3	FREE	
	Other.	0087.4	FREE	
"	OYSTERS—Not in airtight containers.			(3) Tariff as specified in this list is applicable to all imports as from the 1st of January 1937.
	Fresh or Frozen (except seed oysters).	0087.5	FREE	
	Other.	0087.6	FREE	
"	SHELLFISH—Not specially provided for.	0087.7	FREE	
"	LOBSTER PASTE AND SAUCE.	0087.8	FREE	

Paragraph No.	*Article*	*Class No.*	*Rate of Duty* (3) *See Notes*	*Notes*
1761	PASTES AND SAUCES OF SHELLFISH—Not specially provided for.	0087.9	FREE	(1) Imports from Colonies of the United States of America are subject to special tariff.
1790	TURTLES.	0086.2	FREE	
52	ANIMAL AND FISH OIL: inedible.			
	Sperm Whale Oil—Crude.	0803.0	Two and half cents per gallon.	(2) Imports from CUBA are subject to special reductions in tariff under terms of Reciprocal Trade Agreement dated 1 September 1936.
	Sperm Whale Oil—Refined or otherwise processed.	0803.1	Fourteen cents per gallon	
	Whale Oil not specially provided for.	0803.5	Six cents per gallon plus 3 cents per pound revenue tax.	
1730 (b)	COD OIL.	0804.0	FREE	
"	COD LIVER OIL.	0805.0	FREE	
52	HERRING OIL.	0808.0	Five cents per gallon plus 3 cents per lb. revenue tax.	(3) Tariff as specified in this list is applicable to all imports as from the 1st of January 1937.
"	HALIBUT OIL.	0808.1	Twenty per cent Ad. Valorem.	

Paragraph No.	*Article*	*Class No.*	*Rate of Duty* (3) *See Notes*	*Notes*
52	MENHADEN OIL.	0808.3	Five cents per gallon plus 3 cents per pound revenue tax.	(1) Imports from Colonies of the United States of America are subject to special tariff.
"	SOD OIL.	0808.4	Five cents per gallon.	
"	MARINE ANIMAL AND FISH OILS not specially provided for.	0808.5	Twenty per cent Ad. Valorem, plus 3 cents per lb. revenue tax.	(2) Imports from CUBA are subject to special reductions in tariff under terms of Reciprocal Trade Agreement dated 1 September 1936.
"	SEAL OIL.	0816.0	Six cents per gallon, plus 3 cents per lb. revenue tax.	
1780	FISH SCRAP AND FISH MEAL.	0976.0	FREE	
	COD LIVER OIL CAKE AND COD LIVER OIL CAKE MEAL.	098.23	FREE	
1624	FISH SOUNDS.	098.20	FREE	(3) Tariff as specified in this list is applicable to all imports as from the 1st of January 1937.
1677	FISH—For other than human consumption.	098.19	FREE	

Paragraph No.	*Article*	*Class No.*	*Rate of Duty* (3) *See Notes*	*Notes*
41	FISH GLUES—Valued at less than 40 cents per pound.	0934.0	One cent per lb. plus 15 per cent.	(1) Imports from Colonies of the United States of America are subject to special tariff.
	Valued at more than 40 cents per pound.	0940.3	Eight cents per lb. plus 25 per cent.	
1678	FISH SKINS—Raw or Salted.	0298.0	FREE	(2) Imports from CUBA are subject to special reductions in tariff under terms of Reciprocal Trade Agreement dated 1 September 1936.
1765	SEAL SKINS—Raw (not Fur Skins).	0298.1	FREE	
"	HIDES AND SKINS—(Not Fur) not specially provided for.	0299.9	FREE	

(3) Tariff as specified in this list is applicable to all imports as from the 1st of January 1937.

PART VI.

EFFECT OF IMPORTS ON UNITED STATES DOMESTIC PRODUCTION

280. The chief United States domestic products are:—

Canned Salmon.
Canned Standard Sardines (pilchards).
Canned Tuna.
Fresh and Frozen Sea Fish for:
1. Immediate consumption.
2. Manufacture of meal and oil.

and the outstanding fishery products imported into the United States are, in their order of importance:—

Canned Fancy Sardines.
Salted Cod.
Salted Herring.
Fresh Lake Fish.
Canned Tuna.

281. This rather wide difference in the composition of the main heading of imports and United States domestic production, indicates quite definitely that imports can be considered, for the most part, additional to, rather than directly competitive with, United States domestic production.

282. There are, however, certain import groups, which enter into competition with similiar products of the United States domestic production. These groups, for the most part, hold interest for Newfoundland and are:—

Cod Haddock and its related species.
Halibut.
Mackerel.
Salmon.
Sea Herring.
Smelts.

283. The above groups, with such others as fresh water fish, sturgeon, swordfish, and tuna, represent approximately 97 percent in quantity and 96 per cent in value of all imports. The remaining 3 percent in quantity and 4 percent in value of the total imports consist chiefly of unclassified fresh and frozen fish and preserved specialties not produced in the United States.

284. The statements that follow covers the groups above, which are of the same species as referred to in Part III, "Detailed information of the various species," but are now considered from the point of view to examine the effect of their import into the United States, upon the United Staes domestic production.

COD, HADDOCK, HAKE, POLLOCK AND CUSK

285. *General*

Cod, Haddock, Hake, Pollock and Cusk are usually referred to as "cod and related species" or as "ground fish" (bottom feeding fish).

286. Although most vessels can take the five species simultaneously, some of them specialize in cod and others in haddock. When sold fresh or frozen each specie is marketed as a distinct product. When salted or canned, most of the species are marketed as cod, but smoked cod fillets and smoked haddock fillets are marketed under their respective names, and split smoked haddock as finnan haddie.

287. In world supply, cod is by far the most important, representing approximately 75 per cent of the species "ground fish" caught. It is also the chief specie imported, totalling approximately 95 per cent of ground fish imported. Almost all of the imports of cod consist of salted fish, whereas the bulk of the United States domestic catch is sold fresh or frozen for table use.

288. Haddock, although a lesser part of the import trade, is more important than cod in the United States domestic catch as it is sold almost entirely fresh or frozen and principally in the form of fillets.

289. The other species forming this group are not important in United States domestic production or in imports, but they are known to serve as substitutes for the two major species, as well as being marketed as "fillets of fish."

290. The most important part, about 95 percent, of the United States domestic catch of ground fish comes from the North Atlantic.

291. The domestic fishery for cod and related species has changed radically in the last century in practically all of its applications to the United States domestic market.

292. In 1895 the salted catch of cod landed by the United States fishing fleet totalled 45 million pounds and in 1935 totalled only 2½ million pounds.

293. In 1895 the fresh cod landed, totalled 24 million pounds and fresh haddock 42 million pounds. In 1935 the fresh cod landed totalled 87 million pounds and fresh haddock landed totalled 157 million pounds.

294. During this period of forty years, transportation and refrigeration facilities have developed so rapidly that the figures regarding salt cod alone are interesting.

295. In 1895 the United States imported approximately five million pounds of salt cod fish and in 1936 imported approximately fifty-eight million pounds. In terms of whole fish, imported chiefly from Canada, Newfoundland and Norway, the 1936 imports represented 140 million pounds of which 80 per cent, in terms of whole fish, i.e., 112 million pounds, was salted fish, and 20 per cent, in terms of whole fish, i.e., 28 million pound, was in the frozen form, and in fillets, etc.

296. Exports of salt cod fish from the United States dropped in conjunction with the drop in domestic production from 11,000,000 pounds in 1895 to 400,000 pounds in 1935.

297. The fresh and frozen fillets of cod and haddock have shown particular strength in sales as from 1921. Higher prices now being obtained for these products, the salting of these species would obviously decrease.

298. With the foregoing statements as a background of the United States domestic fishery for cod and related species, the effect of imports in their various forms upon the United States domestic production can be examined.

Fresh And Frozen Cod And Related Species

299. From 80 percent to approximately 95 percent of the United States domestic catch of from 300,000,000 to 400,000,000 pounds of cod and related species is marketed fresh or frozen for table use.

300. In 1935 imports of fresh and frozen fish of these species amounted to 6,433,000 pounds, divided as follows:—

2,343,000 pounds whole or dressed fish.
4,100,761 pounds fillets.

equivalent to approximately fifteen and a quarter million pounds of whole fish.

301. In 1936 imports of fresh and frozen fish of these species amounted to 12,684,855 pounds, divided as follows:—

3,439,552 pounds whole or dressed fish.
9,255,303 pounds fillets.

equivalent to approximately thirty million pounds of whole fish.

302. The major part of these imports came from Canada.

303. The duty of 2½ cents per pound on fillets is about equal to the rate of duty of 1 cent per pound on whole and dressed fish. The shipments of fillets, rather than the whole fish, results in such a saving in transportation costs, that fillets are obviously more advantageous to ship and represent the bulk of the imports.

304. The domestic market is large and growing, and the recent development of the frosted food householder package product is increasing the fillet trade faster than ever the originators of the idea thought possible.

305. In 1933 the imports of fresh and frozen cod and related species constituted only 6 percent of the domestic consumption of filleted fish and one percent of the whole and dressed fish.

306. In 1936 the imports constituted approximately 10 percent of the domestic consumption of filleted fish and 2 per cent of the whole and dressed fish.

307. It can, therefore, be confidently said that imports of fresh and frozen cod and related species have at present no very adverse effect on the United States domestic fishery, and, moreover, from an examination of the sales areas it can be said that any competition that does exist is located principally in the Mid-West markets.

Salted

308. The facts detailed in the "General" opening section show clearly the reasons why United States domestic consumption of salted cod and related species has been supplied largely by imports more than by the United States domestic production.

309. The imports of salted products consist almost entirely of cod in the following forms:—

1. Green Salted.
2. Dry Salted.
3. Boneless.

310. *The Green Salted Fish* is chiefly imported into Gloucester, Massachusetts, for further processing, principally for the boneless cod. In addition, the canning of codfish cakes and codfish flakes has been developed in recent years and provides an additional United States domestic product processed from the imported green salted fish.

311. These forms of United States domestic products are encouraged in the United States by the low rate of import duty on the intermediate green salted product, i.e., three quarters of a cent per pound, as compared with the rates applied to all other kinds of codfish products.

312. Production of the above United States domestic products from imported green salted codfish is approximately four times as large as production from United States domestic caught raw fish.

Dried and Unsalted Cod

313. The United States consumption of this type of cure consists entirely of the so called stockfish imported from Norway and dried cod specialties imported from Japan. There is a small United States domestic production in Alaska but this is negligible when compared with imports. The largest United States domestic production figure has never been more than 6 per cent of the total consumption, but usually this production figure is just over 1½ percent of the total consumption.

Kippered And Smoked

314. The United States domestic production of smoked cod and related species probably supplies at the present time slightly more than half of the United States domestic consumption.

315. The total imports of smoked and kippered cod and related species for 1936 were 2,758,493 pounds divided as follows:—

(a) Whole or beheaded or eviscerated 928,304 pounds, dutiable at 2½ cents per pound and consisting almost entirely of finnan haddies (smoked split haddock).

(b) Filleted, skinned, boned, etc., 1,830,189 pounds, dutiable at 3 cents per pound and consisting chiefly of smoked codfish fillets.

316. Canada supplied almost all of the imports of both products.

317. The consumption of finnan haddie has fallen off during recent years but examining statistics the decline has been almost entirely at the expense of the United States domestic production, imports having increased during that period. This result may be due in part to the quality of fish used for the manufacture by United States domestic producers as it is openly stated by the wholesale and retail trade that the quality of the Canadian product is by far superior to the United States domestic product.

318. In addition, the smoked haddock fillets and finnan haddie have both declined against the competition of the smoked cod fillets and at present the production of smoked haddock fillets is negligible compared with the production of smoked cod fillets.

319. Imports of this product come chiefly from Canada and supply the larger percentage of the United States domestic consumption. This position may be accounted for by the lower price of the raw material in Canada, for, notwithstanding the difference in customs duties of 1 cent per pound for the whole fresh fish and 3 cents per pound for the smoked fillets, the quantity of whole fish imported for filleting and smoking is considered negligible. Furthermore, the loss in weight of at least 65 percent in processing, the high cost of transportation in bringing in the whole fish, make it more advantageous to import the fish in the form of fillets.

Canned

320. There is little competition between United States domestic and imported canned cod and related species.

321. United States domestic production consists largely of canned haddock fillets, canned fish chowder, canned codfish cake material and canned cod roe.

322. Imports are almost entirely canned cod roe and canned fish balls, cakes and puddings. Imported cod roe and fish cakes are, according to information, prepared in a different manner from the United States domestic products and usually sell at a higher price.

HALIBUT

323. The total imports of halibut, fresh and frozen, in 1936, amounted to 5,074,431 pounds divided into 4,170,284 pounds fresh fish valued at $362,464.00 and 904,147 pounds of frozen fish valued at $75,488.00. The imports for 1936 are the nearest to the high level imported in 1929, when the United States domestic production also reached its highest level at 55,000,000 pounds. The United States domestic production for 1936 totalled 41,188,000 pounds.

324. The percentage of halibut landed by the United States vessels is approximately 90 percent on the Pacific Coast and 10 percent on the Atlantic Coast, and equally so with Canada who supplies approximately 96 percent of the total imports, of which 80 percent are Pacific halibut, and 20 percent Atlantic halibut.

325. Incidentally, the production of frozen halibut in Canada has increased in recent years largely because of the expansion of the market in England for Canadian frozen halibut.

326. There are some imports of frozen halibut from Japan but at no time have these imports constituted any appreciable percentage of the total imports.

327. The production of halibut, both by United States and Canadian vessels on the Pacific Coast, is regulated by the International Fisheries Commission and, in addition, voluntary quota restrictions by the producers themselves have had the effect of stabilizing the halibut fishery.

328. The Pacific States of the United States are large markets for halibut and their supplies are almost entirely from the United States domestic fishery.

329. Competition with imported Atlantic halibut is almost entirely confined to the Mid-Western and Eastern States, the chief centres being Chicago, New York and Boston. Large quantities are consumed in these markets and they also serve as distributing centres for nearby towns.

330. All the centres of competition receive, however, supplies from both the United States Pacific fisheries as well as the Canadian Pacific coast fisheries. The supplies from the Atlantic fisheries, which are almost entirely imported, are shipped principally to Boston and New York.

331. From a study of the statistics relating to the imports of halibut from Atlantic sources into the United States, it will be readily seen that these imports cannot be considered at any time detrimental to the United States domestic production of Atlantic halibut. The Eastern section of the United States is a large consumer of halibut and all fish imported appears to find a ready market.

MACKEREL

332. The domestic catch of mackerel can be definitely divided between:—

(a) Pacific Coast Production.
(b) Atlantic Coast Production.

333. Of the Pacific coast production, the bulk of the catch is canned for national distribution and export, and, in addition, there are practically no imports of fresh, frozen, or salted mackerel on the Pacific Coast. What small quantity of imports of canned mackerel that are sold on the Pacific coast, do not compete with the local pack.

334. The position, therefore, appertaining to the Atlantic coast production, is the principal one for study.

335. The quantity of mackerel landed in 1936 on the Atlantic coast, which is principally at Boston, from the United States domestic fishery totalled approximately twenty-two million pounds, as compared with twenty-seven million pounds in 1935. The landings in 1937 are, up to the

present, and according to information received, still less than the quantities landed for the same period in 1936.

336. The imports of mackerel into the United States in 1936 totalled 5,320,267 pounds divided as follows:—

451,291 pounds fresh or frozen
4,868,976 pounds salted

a total, in terms of whole fish, of approximately 6,900,000 pounds.

337. In 1935 the total imports were 3,899,329 pounds divided as follows:—

118,687 pounds fresh and frozen
3,780,642 pounds salted.

a total in terms of whole fish, of approximately 5,150,000 pounds.

338. The bulk of the imports in 1936 of fresh and frozen mackerel was supplied by Canada and the imports of salted mackerel for the same year were supplied by Norway 42 per cent, Canada 25 per cent, Irish Free State 13 per cent, Sweden 10 per cent, United Kingdom 9 per cent, other countries 1 per cent.

339. It can be definitely said that the bulk of the Atlantic coast domestic catch is marketed fresh or frozen, for, compared with the fishery as a whole, the salting industry is not of great importance.

340. The improved transportation facilities have, no doubt, contributed largely to the decrease in the production of the domestic salting industry. The salting industry does, however, offer a market for surplus catches and, therefore, its value should not be measured entirely by statistics of production. This outlet for surplus catches removes temporary gluts and, therefore, helps to stabilize prices on the fresh market.

341. In recent years, however, the demands of the fresh market and relatively high prices paid for fresh mackerel have caused the salting industry to lose much of its original importance.

342. The imports of salted mackerel at 4,869,000 pounds in 1936 is the highest level reached since 1921, when imports totalled 6,726,970 pounds. Canada's proportion of the total in 1931 was 1,437,000 pounds and of the 1936 imports 1,202,000 pounds.

343. The salting of mackerel is a primary industry in Canada and, in addition to the United States market, the Canadian product finds a market in the British West Indies.

344. Substantially the same conditions prevail in European production, as do in regard to Canadian production. The bulk of the catch of fresh mackerel is used in the European countries by the salting industry. The industry is largest in Norway, followed by the Irish Free State, and in both countries the industry is largely dependent upon the export markets, with the better grades of fish going to the United States.

345. Canada is also the only source of imports into the United States of salt mackerel fillets.

346. The average consumption of pickled or salted mackerel is estimated at approximately 10,000,000 pounds per annum.

347. The average consumption of fresh and frozen mackerel is estimated at 35,000,000 pounds per annum.

348. The general facts, as disclosed in the foregoing, point to the position that imports of mackerel in all its forms do not bring to the United States domestic production, any appreciable amount of competition, and the increase in consumption holds opening for further contributions from the exporting countries.

SALMON

349. The Salmon fishery as a principal United States domestic industry, is important to the United States, especially as regards the operations on the Pacific Coast.

350. The United States and Canada both operate very largely on the Pacific coast and the fishery in that section can be termed a regulated competitive venture between the two countries. This competition of the Pacific salmon catches covers fresh fish in the United States domestic market, the frozen fish in the European market, and the canned salmon in nearly all the world markets.

351. On the other hand, the Atlantic coast salmon fishery is insignificant as regards the quantities taken by United States owned vessels.

352. The imports of fresh and frozen Atlantic salmon are mostly from Canada and for the greater part are sold for immediate consmuption and for mild curing.

353. The imports from the Soviet Union, have increased from a total of approximately 59,000 pounds in 1931 to approximately 276,000 pounds in 1936.

354. In comparison imports of salmon from Newfoundland in 1931 totalled 52,738 pounds, and in 1936 only 4,496 pounds.

355. The fresh and frozen Atlantic salmon imported, averages between one and a half to two million pounds per annum, and finds its market in the New England and Middle Atlantic areas where it enters into competition with Pacific salmon sent from the West Coast of the United States and Canada.

356. The fresh and frozen imported Atlantic salmon ordinarily sells for a much higher price in the eastern markets of the United States.

357. In addition to the fresh and frozen Atlantic salmon there are imports of pickled and salted salmon which consist of the so-called pickled and mild cured salmon. The products are primarily for production of

smoked salmon and come principally from Canada and Japan, followed with shipments from Newfoundland which, in 1936, totalled 19,748 pounds.

358. From the general summing up of the effect of competition of Atlantic salmon in the United States market to the United States domestic product, it can be readily seen that the total of such imports in all its packs cannot be considered as being detrimental to the United States domestic fishery.

SEA HERRING

General.

359. The United States domestic herring fishery can be proportioned as to 74 per cent on the Alaskan coast, 23 per cent on the Maine coast, and 3 per cent from other small grounds. The United States domestic production is large but, as only an average of 23 per cent is caught on the Atlantic coast, the quantity is relatively small, averaging approximately 150 million pounds.

360. In volume, imports consist principally of pickled and salted herring and fresh and frozen sea herring. Imports in 1936 totalled, in preserved state, 53,593,000 pounds, fresh herring 47,352,000 pounds, and frozen herring 2,535,000 pounds, a grand total of 103,479,000 pounds.

Fresh and Frozen Sea Herring

361. The free entry of fresh and frozen herring, the large United States domestic market, and the duty on preserved herring products, are the principal factors to the development of the canning and smoking industry in the United States.

362. Imports of fresh and frozen sea herring are used principally in the herring industries established in the State of Maine, and practically all of these imports come from Canada.

363. United States domestic supplies of herring suitable for the canning and smoking industry, are said to be normally inadequate to take care of the needs of the industries on the Atlantic coast. The volume of imports naturally depends upon the abundance or scarcity of suitable fish in the Atlantic waters, both United States domestic and foreign, (i.e., Canada) and, although the quantities imported vary materially from year to year, the average imports provide approximately 80 per cent of the total quantity used in the United States domestic industries.

Canned Herring Not In Oil

364. Imports of fish under this classification come chiefly from Norway and the United Kingdom, and consist principally of canned kippered herring.

365. A United States domestic industry was commenced in 1916 in Alaska and, although in 1919 the production totalled four and three-quarter

million pounds, the industry seems to have been abandoned, as no canned kippered herring has been produced in the United States since 1921.

Pickled And Salted Herring

366. Imports of pickled and salted herring are principally from the United Kingdom, the Netherlands, Newfoundland, Canada, Norway, and Iceland. Imports supply approximately 55 per cent of the United States domestic consumption including that part of the imports used in the smoking industry. The United States domestic production of these products is confined almost entirely to Alaska and Maine.

367. Practically all the supply of salted herring, landed chiefly in Massachusetts, by American vessels from the Treaty Coast of Newfoundland, as well as most of the United States domestic production in Maine, are smoked, and thus compete with the imported smoked herring rather than with the imported pickled or salted herring.

368. If the small quantity of salted herring used for smoking is omitted from consideration, the information received indicates that imports of salted and pickled herring supply approximately 65 per cent of the United States domestic consumption.

369. While it must be recognized that all salt herring products compete directly and indirectly with one another, the principal competition is really between the United States domestic Scotch cured Alaska herring and the imported Scotch cured product.

370. Prior to the establishment of the industry in Alaska, the United States domestic market was supplied almost entirely, by imports. The United States domestic industry has fluctuated widely, as a comparison of statistics of 1922 and 1934, the last year complete information is available, indicates. This comparison shows:—

	1922	1934
Scotch Cured Herring	35,995,000 lbs.	7,409,000 lbs.
Herring Meal	1,646 tons	13,955 tons
Herring Oil	425,240 gals.	3,710,350 gals.

371. Statistics also state that the United States herring meal and oil production in 1922 consumed approximately 17,500,000 pounds of fresh fish, and in 1934 the production consumed 148,500,000 pounds of fresh fish.

372. Information received points to the opinion that the domestic industry is considered, in spite of the fluctuations in seasonal runs and the sometimes scarcity of suitable herring for Scotch curing, to still have room for expansion.

373. The imports of Scotch cured herring from the United Kingdom were in previous years far larger than from any other supplier and in comparing 1931 with 1936 the imports under the classification Herring, Pickled

or Salted, in bulk or in containers, weighing more than 15 pounds each, were distributed as follows:—

Country	1931	1936
United Kingdom	21,105,137	5,967,553
Netherlands	8,688,532	9,816,830
Norway	2,214,419	8,375,917
Canada	2,881,088	3,275,683
Newfoundland	3,609,135	4,823,345
Sweden	563,827	2,458,641
Iceland	1,127,018	1,907,106
Other Countries	1,373,635	1,046,454
Totals	41,562,791	37,671,529

Smoked Or Kippered Herring

374. Imports of smoked or kippered herring, other than canned, consist principally of:—

(1) Hard dry smoked herring (bloaters) principally from Canada.
(2) Boneless herring principally from Canada.
(3) Kippered herring principally from the United Kingdom.

375. In previous years Newfoundland shipped hard smoked, soft cured bloaters, termed Newfoundland Johnnies, but in 1936 these shipments have fallen away to the insignificant figure of 1,600 pounds, as against 150,000 in 1935 and 179,000 pounds in 1932.

376. All of the above products are produced in varying quantities by the United States domestic industries.

377. The hard dry smoked herring (bloater) industry has its headquarters in Maine, where the bulk of the production is further processed in the manufacture of boneless herring. Information received also points to the fact that certain quantities of boneless herring are also produced from imports of bloaters. The fresh herring used for the United States domestic production of this product is largely imported from Canada as there is, according to information, a deficiency of suitable herring in United States waters.

378. Hard smoked soft cured bloaters are manufactured principally in Massachussets from the salt herring brought into the United States, duty free, by American vessels fishing off the Treaty Coasts of Newfoundland, as products of the United States fisheries. This fact, together with the tariff rates on the preserved product, is obviously a principal reason why the smoking for the domestic market is now carried on in the United States and in consequence the participation of Newfoundland in this industry has decreased considerably.

379. The production in Maine of smoked herring is principally from fresh sea herring imported from Canada as, according to information, there is a shortage of suitable fish in the United States waters.

380. In regard to the manufacture of boneless herring, similar conditions exist and about 80 per cent of the fresh herring used by the United States domestic industry in the production of this boneless herring product, is imported from Canada. In addition, quantities of the intermediate product (bloaters) imported from Canada are used for making boneless herring and further, such imports that are made into the United States, of boneless herring, come almost entirely from Canada.

381. The production of kippered herring by the United States domestic industry is principally in the eastern centres of population. There is a large consumption in these cities as well as in various of the large centres.

382. The industry uses principally the United States domestic frozen and imported frozen herring. Information received indicates that approximately 70 per cent of the frozen herring imported from Canada is used in the manufacture of this product.

383. In previous years the imports of this product, chiefly from the United Kingdom, were much larger, but to-day the free import of the frozen sea herring, the duty of 3 cents per pound on the kippered herring, and the perishable nature of the finished product, all operate against the larger importation.

384. In spite of this fact, however, imports still provide approximately one half of the United States domestic consumption.

385. Summarizing the facts, data, and information collected, the effects of imports on the United States domestic production and competitive condition in the market, may be adjudged as follows:—

Fresh and Frozen Herring

386. Imports are duty free and are utilized largely in the manufacture of the various preserved products. There is evidence that there is a shortage of suitable fish in the United States waters, and the quantities imported depend upon the abundance or scarcity of herring in the United States domestic waters.

Pickled Or Salted Herring

387. Imports supply approximately 70 per cent of the United States domestic consumption and include appreciable quantities of types of herring not produced in the United States.

388. The United States domestic industry is confined almost entirely to the production of Scotch cured herring in Alaska. Imports of pickled or salted herring supply approximately one half of the United States domestic consumption.

Smoked or Kippered Herring

389. The United States domestic industry is largely dependent upon imports for its supply of raw material (fresh and frozen herring) as there is a shortage of suitable fish in United States national waters.

390. It can be said that, but for the free entry of the fresh and frozen herring and the duty on the smoked or kippered herring, it is probable that the bulk of the products now produced in the United States, would be imported.

SMELTS

391. The importation of smelts into the United States is free of duty.

392. From information received it is definitely stated that the catch of smelts in the Atlantic coast waters of the United States is inadequate for consumption in the eastern section of the United States. There is a large catch of smelts by the United States domestic fishery on the Pacific Coast, but most of this production is consumed west of the Rocky mountains. There is also an appreciable catch of lake smelts by the United States domestic fishery. However, the eastern trade dealers contend that there is a marked difference in texture and flavour of the Atlantic smelt as compared with the two other species referred to above.

393. The imports of Atlantic smelts, which sell for a substantially higher price than the bulk of the United States domestic catch, come principally from Canada, and a comparison of imports of the years 1931-1935 and 1936 is as follows:—

Country	1931	1935	1936
Canada	6,257,000	6,777,000	8,341,000
Newfuondland	282,000	147,000	173,000
Japan	Nil	162,000	95,000
Netherlands	93,000	Nil	3,000
Total Imports	6,632,000	7,086,000	8,612,000

394. The imports of Atlantic smelts are entered in the north-eastern and mid-west States and find a ready market.

395. The consumption of smelts in the United States is appreciable and the quantity imported from the Atlantic coast does not affect the United States domestic catch.

396. It can, therefore, be stated that the importation of smelts from the Atlantic coast producers does not adversely affect the United States domestic fishery.

SHELLFISH

397. The market for shellfish in the United States has for many years been an important one.

398. Shellfish is in the class of the higher priced foods and represents to both the United States domestic fisheries and to the exporting countries, a valuable source of income.

399. The main products of the United States domestic shell fisheries are, in order of importance:

(1) Oysters
(2) Shrimps.
(3) Crabs
(4) Clams
(5) Lobsters
(6) Scallops

400. Of the above species:—

(1) Lobsters
(2) Scallops
(3) Clams

are of most interest to Newfoundland.

Lobsters

401. The lobster production of the United States domestic fishery is divided into two parts, (1) In connection with the common lobster, and (2) In connection with the spiny lobsters, more commonly known as Cray or Craw fish.

402. The Spiny Lobster is a product of the warmer or mid-tropical zones, whereas the Commons Lobster is almost entirely produced by fisheries on the New England Coast.

403. The average production of the Common Lobster has been placed at between ten and eleven million pounds, but for the years 1935 and 1936 the production dropped below that figure. The State Governments of Maine and Massachusetts through their own local Fishery Inspection Service have been making serious efforts to protect the lobster fishery, and in the State of Massachusetts the fishermen are reimbursed for all egg bearing lobsers caught in their pots.

This action has had adverse criticism and may be discontinued but observers feel that this method has served its purpose by bringing very

strongly to the notice of the fishermen that the taking of egg bearing lobsters is a means of gradually destroying the industry. The State officials claim that many fishermen are now voluntarily throwing these lobsters back and not seeking the Government payment.

404. The larger part of the lobster production is sold fresh and in a live state, being boiled by the large consumer, such as the hotels and restaurants and the retailer, as required and ordered.

405. The production of manufactured products from the lobster appears to be exclusively confined to fresh cooked packaged lobster meat. The quantity utilized for such packages has increased during the past three years and has now reached a total of approximately one and a half million pounds. There is, according to information, no canning of lobster by the United States domestic industry.

Imports

406. The fresh and frozen lobster imported into the United States is admitted free of duty. The tariff classification groups together imports of both the Common Lobster and the Spiny Lobster, but analysing statistics show that:—

(a) Common Lobster is imported from Northern Countries.
(b) Spiny Lobster from Southern Countries.

407. The imports of Class (a) come mostly from Canada. During the fishing season a large number of lobsters are impounded in Canada, so that during the close season there are supplies to draw from. This policy has worked to the advantage of stabilizing supplies on the market but it is subject to many disadvantages, the most important being shrinkage and the effect of imports of frozen Spiny Lobster which arrive mostly during the non-fishing season. The imports of frozen spiny lobster have been a recent and rapid development of the last two years.

408. The main source of supply of the spiny lobster tail, i.e., (crayfish crawfish or rock lobster) is the Union of South Africa, and efforts are being made by the United States producers of Common Lobster to have the Spiny Lobster tail marketed under its proper name as Crayfish.

409. There is an increasing importation of frozen cooked lobster meat. This product has a growing acceptance for the package trade, but its importation into some of the lobster producing States is prohibited. The States permitting importation provide worhwhile markets.

410. Generally at the present time the importation of Fresh or Frozen lobster is not considered adversely by the United States domestic producers, but this position seems likely to change if the present rate of increase in imports of frozen lobster tails is maintained.

411. Canned Lobster is entirely an import item, as no United States domestic production is recorded.

412. The imports although admitted duty free have decreased very considerably since 1931.

1931	1,702,721	pounds	$820,144
1935	897,637	"	410,813
1936	870,589	"	471,528

413. Canada has been the principal source of supply:—

1931	1,648,818	pounds	$800,004
1935	636,937	"	331,182
1936	687,736	"	414,460

414. Newfoundland supplies have been:—

1931	22,390	pounds	$ 9,969
1935	4,220	"	1,874
1936	16,675	"	7,893

415. The impression gained from enquiries made in the trade is that Canned Lobster is now mostly a grocery trade item, the hotels and restaurants having taken up the purchase of the cheaper frozen spiny lobster or crayfish tails for use in made up Lobster dishes.

SCALLOPS

416. The Scallop market has been a comparatively recent development and consumes increasing quantities of this Shellfish.

417. Scallops are divided into two classes:—

(a) Bay Scallop
(b) Sea Scallop

and the total quantities produced by the United States domestic fishery for 1934 and 1936 in each respective class were:—

	1934		
Bay Scallops	792,000	pounds	$236,000
Sea Scallops	4,476,000	"	502,000
	1936		
Bay Scallops	1,736,000	pounds	$313,000
Sea Scallops	4,430,000	"	593,000

418. The quantity "shucked" for 1934 and 1936 were:—

	1934	1936
Bay Scallops	83,122 gallons	160,644 gallons
Sea Scallops	381,798 gallons	381,954 gallons

419. The approximate value at the plants for the 1936 production was recorded at 47 cents per pound for "shucked" Bay Scallops and 21 cents per pound for "shucked" Sea Scallops.

Imports

420. The imports of Scallops have increased considerably and at a total of 2,650,000 pounds for 1936 is double the quantity imported for 1935.

421. Fresh Scallops are mostly shipped to the United States by Canada and the pound unit value in 1936 was 17.2 cents. Japan ships most of the frozen Scallops and the pound unit value in 1936 was 12.5 cents per pound. Newfoundland shipped a small quantity of frozen Scallops which it is stated received a higher price than the price quoted above for Scallops of Japanese origin.

422. Japan has taken away a considerable portion of business from Canada and whereas in 1931 Canada took 80 per cent of the imports, and Japan 20 per cent, the imports for 1936 were divided almost equally between the two countries.

423. According to the information collected, one of the main drawbacks of the Scallop fishery, is the unknown movements of the shoals. The result from this is that production from previous season's fishing centres, cannot always be relied upon. In addition, it is stated that only a portion of the area of the scallop fishery is, in any one year, productive.

424. The above factors together with the increasing demand for this shell fish indicates that the imports are not considered obstructive to United States domestic production.

Soft Shell, Quahaugs Or Hard Shell Clams

425. The clam production of the United States covers a wide area, as statistics provide information of large takings all along the Atlantic Coast as well as on the Pacific and Alaskan Coasts.

426. The total production of clams of all species, during 1936, is given at approximately 26,000,000 pounds valued at $3,250,000. Of this production, the value of the Massachusetts production was $1,300,000.

427. According to statistics, the United States domestic industries consumed, in 1936, 19,200,000 pounds of clams for canning, whole and minced, making clam chowder, broth, bouillon, cocktails, juice and nectar.

428. These manufactured products were valued at $1,500,000.

429. There has been a fairly large increase in the consumption of fresh clams in the Midwestern States, and information points to the fact that even wider sales are expected. The majority of the producing States have, in order to keep the clam beds from being contaminated, set up a very active inspection service and clam fishermen can call upon this service for assistance at any time.

Imports

430. Clams are imported under two headings:—

(a) Clams, Clam juice or either in combination with other substances and in air tight containers.

(b) Clams not in air tight containers.

431. The first category is, of course, the canned product, and the second, clams shipped in sacks or barrels for sale fresh, or for further processing.

432. The first category has decreased very largely for, in 1933, imports totalled over 1,400,000 pounds, whereas in 1936 imports only reached approximately 28,000 pounds.

433. On the other hand, imports of clams "not in air tight containers" totalled in 1933 approximately 1,400,000 pounds, whereas in 1936 imports reached the figure of 4,530,000 pounds. Of these imports Canada supplied approximately 99 percent, and Newfoundland .3 percent.

Exports

434. There appear to be no exports of clams or their products from the United States.

435. The appreciable increase in the imports of fresh clams and quahaugs and the decrease in the imports of prepared clam products demonstrates that the authorities have in mind the protection of the processing industries.

436. This is further evidenced by the fact that the imported duty on prepared clams products was increased in 1936 from 35 percent Ad. Valorem to 35 percent on the American selling price. The Fresh Clams and Quahaugs are admitted free of duty.

437. It is reasonable to suppose, therefore, that the export to the United States of either species of fresh clams is not considered as adversely affecting United States domestic production but as a source of supply to the United States processing industries.

Shellfish Unspecified

438. The effect of imports on the domestic production of shellfish under the classification "Unspecified" is difficult to measure, as the species grouped under this class are numerous and unless the individual statistics of each country are examined it is impossible to separate them to their proper specie.

439. One of the main items in the United States domestic production is squid. The latest statistics available, set the production of this specie at 3,518,000 pounds to a value of approximately $70,000.

440. Squid exports interest Newfoundland. This fish is imported for food consumption in the dried state and for bait in the frozen state.

441. The United States also import a large quantity of shells for domestic industries. These imports, divided, have averaged:—

(1) Green small shells .... 300,000 lbs. Value $32,000
(2) Other unspecified shells.....4,900,000 lbs. Value 65,000

442. Mother of Pearl shell is not included in the above figures.

443. The above classes of imports should be considered as adjacent industries to any development of the Newfoundland fisheries, as imports of this nature appear from enquiries made to have no detriment to United States domestic product.

Miscellaneous Fish

444. The measuring of the effect of imports of fish, classified as "Other and Unspecified" or "Not specially provided for" upon the United States domestic production is, as can be appreciated, a rather difficult problem.

445. Taking the published statistics of the species of fish produced by the United States domestic fishery and allocated to each class of considered consumption, a fair valuation can however be obtained.

446. The classification, *Fish, Fresh and Frozen for Table Use*, is a principal heading of consumption. The United States domestic production of "Other and Unspecified" fish under this heading is approximately 11.5 percent of the total United States production of all species.

447. In comparison, imports of "Other and Unspecified" fish under the same heading is approximately 2.2 percent of the United States production of "Other and Unspecified" fish, or approximately .26 percent of the total United States production of all species for table use.

448. In analysing the species of fish classified under the above heading, it will be seen that the larger percentage of "Other and Unspecified" fish imported, relates to Classes No. 0056.0 and 0060.0 of the United States tariff list. It should be recorded that a tariff rate of 1 per cent per pound on Class No. 0056.0 and 2½ cents per pound on Class No. 0060.0 is levied.

449. The imports and values for the years 1931 to 1936 are as follows:—

Class No. 0056.0

1931	2,556,657 pounds	$205,424
1934	2,540,811 pounds	109,449
1935	4,028,998 pounds	131,429
1936	5,044,403 pounds	133,190

Class No. 0060.0

1931	3,008,143 pounds	$326,578
1934	3,942,094 pounds	467,749
1935	4,100,761 pounds	418,099
1936	9,255,303 pounds	893,645

450. The conclusion, therefore, that can be drawn from the above picture is that imports of fish allocated to "Other and Unspecified" under the classes referred to, do not have any appreciable detrimental effect on the United States domestic production.

451. The imports of "Other and Unspecified" fish under the Classification "Canned" is approximately 37 per cent of the United States domestic production under the above heading and mainly refers to products which do not form any apprceiable part of the United States domestic industry production.

452. The imports of "Other and Unspecified Fish" under the consumption classification, "Salted," are principally species of fish which form in part, the raw material for further production by the United States domestic industries. The importation of these species therefore depends somewhat upon the progress of the United States domestic industries, the quantities of other fish available and the landed price. Imports under this Class No. 0073.5 pay a tariff rate of 1¼ cents per pound.

SWORDFISH

453. The United States domestic production of Swordfish has, according to statistics been gradually decreasing, whereas imports have increased appreciably.

454. The imports of Swordfish can be divided into two distinct parts:

(1) Fresh Swordfish, which comes chiefly from Canada.
(2) Frozen Swordfish, which comes chiefly from Japan.

455. The principal Swordfish landing port for the United States domestic Atlantic catch is Boston and the major part of the Canadian catch imported, is shipped to Boston.

456. The following satistics show the landings at Boston of the United States domestic catch, which represents approximately 67 per cent of the total United States domestic production.

1931 .... 1,505,429 pounds
1934 .... 1,289,770 pounds
1935 .... 2,024,675 pounds
1936 .... 1,216,513 pounds

The total United States domestic production for the same years were:—

1931 .... 3,945,000 pounds
1934 .... 3,748,000 pounds
1935 .... 3,629,000 pounds
1936 .... Not available

Imports from Canada for the similar years were:—

1931 .... 1,116,015 pounds
1934 .... 1,487,415 pounds
1935 .... 2,058,710 pounds
1936 .... 1,981,364 pounds

457. The United States domestic fleet fishes on the Atlantic largely in the same waters as do the Canadian fishermen. It can also be said that Newfoundland fishermen take part in this fishery, their catches being landed at Canadian ports. Information received points to the United States fleet commencing operations first, and their landed catch meets with little competition from other sources of supply.

458. In 1936, the United States custom tariff was modified. This modification was brought about by the disclosure that frozen swordfish which comes principally from Japan sold at a lower price than United

States domestic production, and the excess of domestic costs over Japanese prices was 3.8 cents per pound. The rates of duty were accordingly altered, being set at 1½ cents per pound on Fresh Swordfish, and 3 cents on Frozen Swordfish. This action does not seem to have stopped imports from Japan, as the following figures indicate:—

1931	1,011,874 pounds
1934	1,463,969 pounds
1935	2,113,403 pounds
1936	4,037,229 pounds

459. The consumption of Swordfish in the United States is definitely increasing, not only in the Eastern States, but also on the Pacific Coast. It is stated that to some extent the lower price of the frozen swordfish imported from Japan has contributed to the development of the market.

460. The catching of swordfish is considered as being both difficult and expensive. The quantity of fish available is stated as being relatively scarce, and with a continually widening consuming market, there is little doubt that imports of Atlantic Swordfish are not considered as being detriment to the United States domestic production.

PART VIII

PARTICIPATION OF NEWFOUNDLAND PRODUCTS IN THE UNITED STATES

461. The following statistics give the picture of the participation of Newfoundland products shipped direct to the United States market, covering the years 1931, 1935 and 1936.

Class No.	*Article*	*Newfoundland Lbs. and Dollar Value* 1931	1935	1936	*Total U.S.A. Imports* 1936
717(a)	Salmon	52,738	50,176	4,496	10,506,190
		$8,760	$12,049	$819	$820,301
717(a)	Eels	2,500	.....	158	504,042
		$125	.....	$15	$28,958
717(a)	Cod, Haddock, etc.	.....	.....	200	3,439,552
		.....	.....	$16	$150,885
717(a)	Halibut	7,672	.....	.....	5,074,431
		$720	.....	.....	$457,930
717(a)	Mackerel	4,050	.....	.....	452,291
		$243	.....	.....	$21,225
717(a)	Swordfish	.....	.....	.....	6,025,010
		.....	.....	.....	$665,209
717(a)	Fish, n.e.p.f. whole fresh or frozen	31,925	.....	.....	5,044,043
		$76	.....	.....	$183,910
1756	Smelts	282,026	146,693	172,736	8,611,650
		$35,708	$19,465	$24,710	$848,271

461. (Continued).

Class No.	Article	Newfoundland Lbs. and Dollar Value 1931	1935	1936	Total U.S.A. Imports 1936
1756	Sea Herring fresh	700	.....	16,400	47,351,773
		$63	.....	$87	$317,122
1756	Sea Herring, frozen	.....	.....	247,000	2,535,159
		.....	.....	$1,235	$70,732
717(b)	Fillet of fish, fresh or frozen n.e.p.f.	225	3,300	80,289	9,255,303
		$25	$377	$6,500	$893,646
717(c)	Cod and related species	13,216	.....	.....	22,587
		$850	.....	.....	$1,140
	Other fish, n.e.p.f.	280	1,500	265	3,324,826
		$13	$179	$29	$368,899
718(b)	Salmon	670	.....	.....	2,323,825
		$109	.....	.....	$150,628
718(b)	Herring	.....	.....	.....	12,880,711
		.....	.....	.....	$994,155
718(b)	Fish Cakes, etc.	.....	.....	.....	2,029,709
		.....	.....	.....	$135,269
719(1)	Salmon	40,800	.....	19,748	265,113
		$2,365	.....	$1,796	$29,460
719(2)	Cod and related species, 43%	7,002,635	.....	129,380	3,152,214
		$346,214	.....	$5,332	$160,428

461. (Continued).

Class No.	Article	Newfoundland Lbs. and Dollar Value 1931	1935	1936	Total U.S.A. Imports 1936
719(2)	Cod and related species, over 43%....	3,114,666	16,841,447	26,699,134	52,359,316
	....	$156,360	$643,487	$666,028	$1,537,784
719(3)	Cod and related species....	324	.....	10,800	2,475,519
	....	$21	.....	$929	$239,463
719(4)	Herring....	3,609,135	5,437,589	4,823,345	37,671,529
	....	$148,466	$190,248	$138,865	$1,815,700
719(4)	Mackerel....	18,000	7,000	220	4,868,976
	....	$805	$210	$88	$256,061
719(5)	Pickled Fish....	19,863	2,940	2,000	724,497
	....	$1,205	$211	$131	$61,192
720(a)1)	Salmon....	.....	.....	4,000	34,474
	....	.....	.....	$325	$10,717
720(a)2)	Herring....	85,065	150,624	1,600	2,163.487
	....	$7,363	$2,834	$208	$81,996
720(a)3)	Herring Split....	3,000	3,460	$32	876,515
	....	$169	$321	$1	$74,336
720(a)4)	Cod and related species....	.....	.....	.....	928.304
	....	.....	.....	.....	$92,767
720(a)5)	Cod and related species....	27	.....	200	1,830,189
	....	$3	.....	$13	$181,978

461. (Continued).

Class No.	Article	Newfoundland Lbs. and Dollar Value 1931	1935	1936	Total U.S.A. Imports 1936
720(b)	Fish Smoked n.s.p.f.	4,000	.....	400	356,733
		$198	.....	$16	$23,812
1761	Clams, Quahaugs	15,760	.....	13,703	4,529,718
		$335	.....	$2,375	$60,841
1761	Lobsters, not canned	9,919	340	766	11,121,533
		$3,684	$90	$456	$2,487,211
1761	Lobsters, not canned	22,390	4,220	16,675	870,579
		$9,969	$1,874	$7,893	$471,528
1761	Scallops, not frozen	.....	.....	.....	1,363,794
		.....	.....	.....	$235,572
1761	Scallops, frozen	.....	.....	6,090	1,288,781
		.....	.....	$1,350	$159,364
1761	Shellfish, n.s.p.f.	16,545	160,010	150,044	3,513,431
		$2,641	$18,159	$14,465	$451,137

462. The picture presented above cannot be taken as representing the complete participation of Newfoundland products in the United States market.

463. There are two other channels of participation in addition to the direct shipments. They are:—

(a) The landing of catches by Newfoundland fishermen in Canadian ports.
(b) The takings of American vessels on the Treaty Coast of Newfoundland.

464. It is impossible to state what proportion of channel (a) above, is sent into the United States, but enquiries indicate that the quantities and qualities are fairly representative.

465. As regards the takings of American vessels on the Treaty Coast, the latest statistics available record that in 1934, twelve United States vessels fished off the Treaty Coast making a total of seventeen round trips covering 436 fishing days. Production of these vessels was reported as follows:—

Cod	792,329	pounds divided:—
	537,024	pounds large cod.
	221,148	pounds market cod.
	34,157	pounds scrod cod.
Haddock	192,850	pounds divided:—
	182,540	pounds large haddock.
	10,400	pounds scrod haddock.
Hake	16,821	pounds.
Cusk	1,705	pounds.
Halibut	315,010	pounds.
Herring	393,300	pounds.
Swordfish	1,315	pounds.

a total of 1,713,400 pounds of all species.

466. The total of direct exports from Newfoundland to the United States for 1931,, 1935, and 1936, expressed in pounds and dollar value, are recorded at the following figures:—

Year	*Quantity Pounds*	*$ Value*	*Value per lb.*
1931	14,359,141	726,490	5.05
1935	17,371,170	889,504	5.12
1936	32,394,894	873,048	2.72

467. The percentage value of these direct shipments in comparison with the United States imports as a whole are:—

Imports.... ....9.35 percent.
Value.... ....2.87 percent.

468. The average value per pound unit covering all species of fish shipped by Newfoundland exporters to the United States at 2.72 cents is the lowest recorded value in the imports list. This standing in the list is no doubt due principally to the large percentage of Green Salted Codfish, which represents approximately 83 (eighty-three) per cent of direct exports from Newfoundland. It should be noted that the large quantity of

> "Green Salted Codfish containing more than 43 percent of moisture by weight"

included in the Import statistics of the United States, refers partly to fish shipped from Newfoundland to Porto Rico.

469. The practice adopted by the United States Government in regard to imports into Porto Rico, is to incorporate the quantities of such imports into the main United States import statistics. The quantity of Salt Codfish of all species imported into Porto Rico for the year ending December 1936 is reported at 28,599,270 pounds.

PART VIII

COMPETITION TO NEWFOUNDLAND PRODUCTS

470. The sources of competition to the participation of Newfoundland products in the United States market are not difficult to ascertain.

471. In some instances European products compete with those from Newfoundland, but generally speaking the principal competitive sources are:—

(1) The Canadian fishery.
(2) The lack of Newfoundland production.

472. Analysing the published statistics it can be definitely concluded that what Canada can produce, Newfoundland should be able to, for, whilst to-day in many of the classes of fish products, Newfoundland has dropped out, in previous years shipments have been made to the United States.

473. Canada has, it must be fully recognized, very valuable advantage in:—

(1) Its close proximity to the United States market.
(2) An industry, although not fully organized, and completely efficient, yet sufficiently so to enable it to take advantage of the opportunities offered by United States market.
(3) Close protection and assistance by both Federal and Provincial Governments.

474. The Canadian competition is also somewhat assisted by the landings at Canadian ports of fresh fish caught by Newfoundland fishermen. This supply is not readily available to Newfoundalnd firms because, firstly, there is no maret for the catches, and secondly, if such a market did exist, there would be the added cost of transport to Canada, and there are no direct transportation facilities from many ports on the Coasts of Newfoundland to the United States.

475. It might be advanced that the United States tariff wall is the most important obstacle to larger Newfoundland participation. There is no doubt that the import duties do present a major difficulty, but the same difficulty is in force against the products of Newfoundland's competitors.

476. The increase in imports to the United States, of products from competing countries demonstrates that the tariff wall is not altogether the most important barrier.

477. The competing countries to Newfoundland have a considerably larger and more varied fishery production, and it would seem that, in the face of things as they are to-day, the principal barrier to the larger competition is centred in the lack of production by Newfoundland firms.

478. It has to be admitted that Newfoundland fisheries are not recipient of the similar support as is given to the Canadian fisheries, but, even allowing the fullest value for this support, it must be admitted that the major benefits the Canadian fisheries have are:—

(1) The fisheries are better centralized.

(2) The fisheries are more efficiently operated.

479. If some means of centralization could be devised for obtaining more ample production, then there is little doubt that Newfoundland could take care of a larger part of the United States business.

480. For the present, with the exception of salt codfish, most fishery products are produced in Newfoundland only when definite sales are guaranteed. This is contrary to the general trend of the fish trade, but no one can lay blame on the cautious attitude of the Newfoundland producers, as a close study of the subject will reveal the very difficult position they are in.

481. Enquiries made among the larger buyers indicate their willingness to receive offers of Newfoundland fish products.

482. It is common knowledge that the quality of the fish landed at the main fishing ports on the Atlantic, especially Boston, by the United States vessels, leaves much to be desired. This fact compels many of the principal distributors to go to Canadian sources of supply for certain cures of fish. Particular instances have been demonstrated during the course of this survey and the question often asked "What can Newfoundland offer, and when can they ship." The answer is of course "That Newfoundland has nothing to offer as yet, but if you will tell them what you require they will then go out and endeavour to produce."

483. That Newfoundland products of good quality and competitive in price can be sold, there is little doubt, but the conclusion is that the unorganized state of the industry and the lack of production are the two principal competitors to a larger participation in the United States fishery market.

PART IX

STATISTICS OF UNITED STATES CONSUMPTION

484. The latest year that complete statistics are available detailing consumption of fishery products in the United States is the year 1933.

485. The table in Paragraph 487 gives the percentages of consumption of the different classes of fish, supplied from both the United States domestic production and foreign sources, for the year 1933.

486. The proportion of total consumption from both of the above sources has been arrived at by:—

(1) Adding together all kinds of products without conversion to a common basis in terms of fresh fish.
(2) By conversion to a common basis of fresh fish.

In this latter case, the calculation shows a larger proportion of consumption supplied by imports, but this is occasioned by the fact that the United States domestic production consists mostly of fresh fish, whereas imports are largely of preserved fish.

487. Consumption Percentage 1933:—

Article	*Proportion of Total Consumption*			
	Quantity		*Value*	
	U.S. Domestic	*Imported*	*U.S. Domestic*	*Imported*
	Percent	Percent	Percent	Percent
Fresh and frozen for direct table use	92.7	7.3	83.3	16.7
Canned	86.5	13.5	88.2	11.8
Salted	33.0	67.0	46.2	63.8
Smoked	91.2	8.8	96.8	3.2
Unspecified	26.1	73.9	9.7	90.3
Total:				
Actual without conversion to a common basis	85.7	14.3	84.5	15.5
Converted to a common basis	82.6	17.4	84.5	15.5

488. The production of the United States domestic fisheries in 1933 was given at a quantity of approximately 3,000 million pounds. From this quantity has to be deducted exports of fishery products, non edible products and oils.

489. It is considered that of the 3,000 million pounds approximately 1100 million pounds were used by the rendering plants and 200 million pounds were used for export, leaving a net figure of 1700 million pounds of fish of United States domestic origin.

490. To this quantity has to be added the imports of edible fish and fish products. These imports can be averaged at approximately 300 million pounds, providing therefore a full total of 2000 million pounds of fish of all species consumed in the United States.

491. The population of the United States is given by the last official census in 1930 at 123 millions, but survey figures recently compiled by other organizations put the total population at approximately 130 millions.

492. The division of the total population of 123 millions into the total commercial fish production of 2000 million pounds gives an average consumption of approximately 16 pounds of fish and fish products per capita.

493. The most recent publication in regard to capita consumption was issued in February, 1935, covering known statistics for 1931. This gives capita consumption at 13.3 pounds. An examination, however, of more recent statistics reveals an improved average of per capita consumption. It should be emphasized that any calculation as to capita consumption can only be taken in a very approximate form as the totals of fishery products do not cover all classes and there is also a large quantity of fish caught in domestic waters that are consumed without passing through the regular trade channels.

494. The 1931 statistics in detail cite capita consumption in New York at approximately 32 pounds. Information collected to-day puts the figures at nearer 50 pounds. The 1931 statstics put the capita consumption of such inland towns as St. Louis and Louisville at 9 and 6 pounds each respectively, whereas merchants indicate that to-day these figures can be conservatively increased by at least 30 per cent.

495. The transport of refrigerated products has improved very considerably during the intervening 6 years and in addition the frosted food package has come onto the market.

496. Divided into classes the following is the comparison between:—

(a) Published consumption figures for 1931.

(b) Consumption figures as disclosed by Statistics of the Industry for a later period.

(a) based upon the population of the 1930 census of 123 millions and (b) based upon the same census and present indications of a population of 130 millions.

Consumption

Article	1931	Later Period.	
	1930 census	1930 census	130 millions
Fresh and Frozen Fish ...	8.171 lbs.	12.248 lbs.	11.589 lbs.
Canned Fish	3.564 lbs.	4.093 lbs.	3.873 lbs.
Salted Fish.....	0.972 lbs.	1.112 lbs.	1.052 lbs.
Smoked Fish....	0.288 lbs.	0.291 lbs.	0.276 lbs.
Other Fish..	0.219 lbs.	0.328 lbs.	0.310 lbs.
Totals....	13.234 lbs.	18.072 lbs.	17.100 lbs.

497. The opinions held by the most important operators in the trade is that there has been an appreciable increase in consumption. The statement by a leading fish distributor that "the extension of the Railroad and Trucking Companies refrigerated service to inland towns and the newer types of packages recently adopted had taken fish direct to towns where in the past the dealers had to buy as occasion offered from the large distributing centres", gives added support to the view expressed.

498. The following table gives actual figures in the various classes, of United States Domestic Production, Imports into the United States and Exports from the United States, resulting in the net consumption quantities and values. To indicate the difference in the imports from the year 1933 to the last statistical year, 1936, the total imports and values for that year are included. As it is not known what part of the quantities of Fresh or Frozen Fish imported were used by the United States domestic processing industries this total has had to be omitted.

SCHEDULE NO. 42 *STATISTICS OF CONSUMPTION YEAR 1933. WITH COMPARISON OF IMPORTS FOR YEARS 1933 AND 1936*

ITEM	PRODUCTION 1933-4		IMPORTS 1933		EXPORTS 1933		CONSUMPTION		IMPORTS 1936	
	Quantity Pounds	Value Dollars	Quantity Pounds	Value Dollars	Quantity Pounds	Value Dollars	Quantity Pounds	Value Dollars	Quantity Pounds	Value Dollars
Fish: Fresh and Frozen, for direct table use, including fresh water fish	774,000,000	24,340,000	60,555,000	4,561,000	8,498,000	753,000	626,057,000	28,148,000	.....	.....
Fish: Fresh and Frozen for canning, salting, smoking, rendering and including fresh water fish	1,913,115,000	20,961,000	37,891,000	880,000	.....	.....	1,951,006,000	21,841,000	.....	.....
Total Fresh and Frozen Fish	2,687,115,000	45,301,000	98,446,000	5,441,000	8,498,000	753,000	2,777,063,000	49,989,000	154,112,278	9,193,782
Fish: Canned	490,014,000	52,830,000	67,908,000	6,409,000	54,470,000	4,817,000	503,452,000	54,422,000	65,749,360	8,305,781
Fish: Salted	66,060,000	5,406,000	76,155,000	3,161,000	5,446,000	525,000	136,769,000	8,042,000	101,625,374	4,102,680
Fish: Smoked	32,287,000	7,223,000	3,100,000	237,000	.....	.....	35,387,000	7,460,000	6,782,473	495,950
Fish: Other and Unspecified	1,527,000	83,000	3,747,000	570,000	316,000	63,000	4,958,000	599,009	4,846,240	900,673
Totals	.....	.....	249,356,900	15,827,000	68,730,000	6,158,000	.....	.....	333,115,725	22,998,866
Shell-fish: All Species, Fresh and Frozen	320,225,000	16,436,000	22,315,953	2,509,605	8,234,000	741,000	.....	.....	26,569,145	3,636,943
Canned: Prepared from above	.....	.....	12,509,605	3,529,988	4,010,000	654,000	.....	.....	11,036,616	3,647,488
Prepared and Preserved: Prepared from above	.....	.....	124,524	12,077	255,000	78,000	.....	.....	166,738	24,207
Total—Shellfish	320,225,000	16,436,000	34,950,082	6,051,670	12,499,000	1,473,000	342,676,000	21,075,000	37,792,499	7,308,638

PART X

UNITED STATES MARKET PRICES

499. The comparison of prices covering fish as it progresses along all its stages from landing to consumer, demonstrates such a wide difference that a frequent point of enquiry is as to "Whether means can be devised to bring back some of the difference for the benefit of the original owners, the fishermen."

500. The whole structure of the trade presents such obstacles, that these ways and means are difficult to find. The obstacles start right from the winning of the fish from the sea and dealing with such a perishable product as fish, it is indeed difficult for any person to anticipate results with any degree of certainty.

501. Dealing with the general species of fish landed at the fishing ports, the method of purchase by auction, the quantities landed, and fish on hand, all influence towards variation in price. From the auction stage to the wholesale stage, there are many intervening charges and then from the wholesaler to retailer other charges have to be met.

502. The growth of the fishery products industries is having a certain beneficial effect on the landing prices and as these industries continue to progress, their influence should react favourably to the original owner.

503. At the end of this section a table giving a comparison of the average values per pound of fish, referred to in paragraph 7, through the various price stages is attached.

504. The fact that fish when landed at the ports are in different stages of dressing and cleaning must not be lost sight of. Some are landed with head on and eviscerated, others with head off only, and others as directly taken from the water.

505. In as many cases as possible prices in the accompanying table have been kept to Atlantic fish species, but in some cases particularly the values at plants, statistics only record production as a whole. In addition there is no separation of species at the wholesale or retail points. It is also necessary to record that retail prices vary considerably and are dependent upon locality of the retail fish store. Nevertheless, the indications in the following tables are safe guides as to the values of the different products.

SPECIE	Price at Landing Port (1)	Price at U. S. Plants (1)	Import Value (1)	Wholesale Price (1)	Retail Price (1)	Frozen Packaged Fish	
						F. O. B. Plant (1)	Retail (1)
COD—Large Fresh (steak)	3.2	.....	4.4	4.0 to 5.0	14.0	.....	.....
Market Fresh	2.7	.....		6.0	18.0	.....	.....
Fresh Fillet	.....	11.9	.....	16.0	24.0	.....	.....
Frozen Fillet	.....	7.7	9.6 (4)	8.5	20.0	20.9	25.0
Dried and Unsalted	.....	.....	4.5	.....	.....	.....	.....
Salted Green	.....	4.8	2.9	.....	.....	.....	.....
Salted Dry	.....	5.9	5.0	11.0	17.0	.....	.....
Salted Boneless	.....	17.7	9.7	21.0	30.0	.....	.....
Smoked Whole	.....	.....	10.0	.....	.....	.....	.....
Smoked Fillet	.....	14.6	9.9	16.0	23.0	.....	.....
Fish Cakes	.....	$4.36 case	6.6	$5.80 case	$7.20 case	.....	.....
CUSK—Fresh	1.8	.....	(3)	4.0 to 5.0	14.0	.....	.....
Fresh Fillet	.....	13.1	(3)	16.0	23.0	.....	.....
Frozen Fillet	.....	8.3	(3)	.....	.....	.....	.....
Green Salted	.....	2.7	(3)	.....	.....	.....	.....
EELS—Fresh	8.9	.....	(3)	27.0	35.0	.....	.....
Frozen	.....	.....	5.7	.....	.....	.....	.....
Salted	.....	7.5	(3)	.....	.....	.....	.....
Smoked	.....	25.2	(3)	.....	.....	.....	.....
FLOUNDERS—Fresh Whole	4.0	.....	(3)	8.0	20.0	.....	.....
Fresh Fillet	.....	16.1	(3)	18.0	29.0	.....	.....
Frozen Fillet	.....	13.1	(3)	16.0	29.0	29.0	35.0
HADDOCK—Fresh Round	3.5	.....	(3)	8.0	20.0	.....	.....
Scrod Round	2.5	.....	(3)	7.0	18.0	12.0	20.0
Fresh Fillet	.....	11.0	(3)	12.0	25.0	.....	.....
Frozen Fillet	.....	8.3	9.6	10.0	20.0	20.0	27.0
Salted Green	.....	2.1	(3)	.....	.....	.....	.....
Finnan Haddie	.....	8.1	9.9	16.0	22.0	.....	.....
HAKE—Fresh Round	2.9	.....	(3)	4.0 to 5.0	14.0	.....	.....
Fresh Fillet	.....	9.1	(3)	11.0	20.0	.....	.....
Frozen Fillet	.....	6.8	(3)	9.0	18.0	10.0	17.9
Salted Green	.....	2.9	(3)	.....	.....	.....	.....
Salted Dry	.....	4.6	(3)	.....	.....	.....	.....
Salted Boneless	.....	7.4	(3)	.....	.....	.....	.....
Smoked Fillet	.....	11.5	(3)	15.0	20.0	.....	.....

(1) All figures except where denoted especially are cents per pound.
(2) Frozen Fillets of Cod relate to all "Fillets of Fish" as these are grouped together in Imports Statistics without reference to any particular species.
(3) Not particularly specified in Import Statistics.
(4) Alewives and Bluefish are included in United States domestic Production of Frozen Herring.
(5) Mainly Japanese.

UNITED STATES MARKET PRICE COMPARISONS

SPECIE	Price at Landing Port (1)	Price at U. S. Plants (1)	Import Value (1)	Wholesale Price (1)	Retail Price (1)	Frozen Packaged Fish	
						F. O. B. Plant (1)	Retail (1)
HALIBUT— — — — Fresh	11.2	.....	9.1	16.0		.....	.....
Frozen	.....	None Atlantic	8.4	14.0	40.0	.....	.....
Fresh Fillet	.....	19.1	(3)	25.0		.....	.....
Frozen Steaks	.....	16.1	(3)	20.0		33.0	42.0
SEA HERRING— — Fresh	.5	....	.7	3.0	10.0	.....	.....
Frozen	.....	5.40	2.7	5.5	10.0	3.0	10.0
Canned	.....	$3.10 case	7.7	$3.50 case	20.0 per tin	.....	.....
Pickled or Salted	.....	5.3	4.7	9.0	15.0	.....	.....
Smoked or Kippered Whole	.....	8.9	8.4	12.0	20.0	.....	.....
Smoked or Kippered Split	.....	5.9	8.4	12.0	20.0	.....	.....
Smoked or Kippered Boned	.....	10.6	7.8	20.0	30.0	.....	.....
MACKEREL— — — Fresh Round	2.9	.....		10.0	20.0	.....	.....
Frozen Round	.....	.....	4.7	12.0	20.0	12.0	20.0
Fresh Fillets	.....	10.1	(3)	14.0	25.0	.....	.....
Frozen Fillets	.....	8.2	(3)	12.0	25.0	22.0	25.0
Salted Fillets	.....	8.4	(3)	10.0	15.0	.....	.....
Salted Split	.....	7.9	(3)	10.0	15.0	.....	.....
Pickled or Salted	.....	.....	5.2	10.0	15.0	.....	.....
Smoked	.....	14.9	(3)	.....	.....	.....	.....
Canned		$2.75 case	(3)	$4.40 case	12.0 per tin	.....	.....
POLLOCK— — — — Fresh	2.5	.....	(3)	5.0	10.0	.....	.....
Fresh Fillets	.....	7.4	(3)	10.0	20.0	.....	.....
Frozen Fillets	.....	6.6	(3)	10.0	20.0	10.0	15.0
Salted Dry	.....	12.4	(3)	.....	.....	.....	.....
SALMON— — — — Fresh	.....	.....	18.2	23.0	50.0	.....	.....
Frozen	.....	None Atlantic	Atlantic	19.0	45.0	.....	.....
Fillets	.....	16.6	(3)	25.0	50.0	31.0	45.0
Pickled	.....	20.3	10.9	.....	.....	.....	.....
Smoked	.....	30.3	(3)	.....	.....	.....	.....
SMELTS— — — — — Fresh	10.9	.....	9.8	25.0 Large	30.0 to 50.0	.....	
Frozen	.....	.....	Atlantic	12-16 No. 1 & 2	30.0 to 50.0	15.0	30.0
SWORDFISH— — — Fresh	20.8	.....	19.9	25.0	50.0	.....	.....
Frozen	.....	13.9	7.0 (5)	20.0	50.0	32.0	45.0
Fresh Fillets	....	23.9	(3)	27.0	50.0	.....	.....

(1) All figures except where denoted especially are cents per pound.
(2) Frozen Fillets of Cod relate to all "Fillets of Fish" as these are grouped together in Imports Statistics without reference to any particular species.
(3) Not particularly specified in Import Statistics.
(4) Alewives and Bluefish are included in United States domestic Production of Frozen Herring.
(5) Mainly Japanese.

SCHEDULE NO. 43

UNITED STATES MARKET PRICE COMPARISONS

SPECIE	Price at Landing Port (1)	Price at U. S. Plants (1)	Import Value (1)	Wholesale Price (1)	Retail Price (1)	Frozen Packaged Fish	
						F. O. B. Plant (1)	Retail (1)
LOBSTERS — Fresh (Common)	29.0	.....	22.3	30.0 to 50.0	50.0 to 75.0	.....	.....
Frozen Meat	.....	.....	(3)	75.0	$1.50	.....	.....
Common—Cooked	.....	38.6	(3)	63.0	$1.00	$1.10	$1.35
Spiny—Cooked	.....	34.0	(3)	60.0	$1.00	$1.10	$1.35
Canned	.....	.....	54.6	60.0	75.0	.....	.....
CLAMS— Hard, Fresh in Shell	.9	.....	1.3	12.0 doz.	25.0 doz.	.....	.....
Fresh Shucked	.....	11.8	.....	22.0 to 22.0	40.0 doz.	23.0	38.0
Canned Whole	.....	$5.00 per case	21.8	.....	.....	.....	.....
Chowder	.....	$3.50 per case	15.6	.....	.....	.....	.....
Minced	.....	$4.80 per case	(3)	.....	.....	.....	.....
Broth and Cocktail	.....	$6.30 per case	(3)	.....	.....	.....	.....
Juice and Nectar	.....	$4.50 per case	(3)	.....	.....	.....	
SCALLOPS— Fresh, Sea in Shell	13.4	.....	.....	.....	.....	.....	.....
Fresh, Bay in Shell	18.0	.....	.....	.....	.....	.....	.....
Shucked Sea	.....	21.0	17.3	20.0 to 40.0	50.0	.....	.....
Shucked Bay	.....	47.0	.....	55.0	70.0	.....	.....
Frozen Sea	.....	.....	12.5	25.0	35.0 to 40.0	23.0	35.0

(1) All figures except where denoted especially are cents per pound.
(2) Frozen Fillets of Cod relate to all "Fillets of Fish" as these are grouped together in Imports Statistics without reference to any particular species.
(3) Not particularly specified in Import Statistics.
(4) Alewives and Bluefish are included in United States domestic Production of Frozen Herring.
(5) Mainly Japanese.

PART XI

THE UNITED STATES MARKET AND ITS DEVELOPMENT

506. The economic disturbances which affected almost all industries during the years 1931 to 1933, had a similar influence upon the United States fishing industry, when domestic production, realization values and imports, all reached lower levels.

507. Examining statistical reports from 1934 to 1936, appreciable increases have been shown in:—

(1) The quantities of United States domestic landings.
(2) The quantities of fish and fish products imported.
(3) The growth of the processive industries.
(4) The United States consumption.

508. That the United States domestic industry has made a very pronounced recovery is evidenced by the comparison of 1934 statistics which register the following increases over 1933 production:—

(1) General catches.... ....30 to 50 per cent
(2) Cannery products.... .... 30 per cent
(3) Frozen products.... .... 40 per cent
(5) By products ... . 30 per cent
(6) Packaged fish.... .... 13 per cent

509. In 1934 the total United States domestic fishery produced, 3,951,000,000 pounds, valued at $74,200,000 dollars. This original production divided amongst its various industries produced:—

Canned Products	700,158,000 pounds	$ 80,022,000
By products		$22,609,000
Frozen products (excluding (packaged fish)	97,291,000 pounds	$ 8,500,000
Cured products	98,142,000 pounds	$13,048,000
Fresh and frozen package fish and shellfish	150,993,000 pounds	$20,679,000
Fresh fishery products	650,000,000 pounds	$52,000,000

510. In 1936, the total United States domestic fishery produced, approximately 4,153,000,000 pounds, valued at approximately $80,121,000 This original production divided amongst its various industries produced:—

Canned products	794,828,000 pounds	$94,658,000
By Products		$24,899,000
Frozen Products	179,274,000 pounds	$25,579,000
Cured Products	120,517,000 pounds	$15,892,000
Fresh or Frozen Packaged Fish (excluding shell fish)	121,485,000 pounds	$12,429,000
Fresh Fishery Products	700,000,000 pounds	$55,000,000

511. The value of the United States domestic industry to domestic primary handlers of all fisheries products, is put at approximately $200,000,000 for 1934, and approximately $225,000,000 for 1936.

512. Exports from the United States in 1934 were valued at $11,200,000, and in 1936 at $10,400,000 thus leaving a net value of $188,800,000 for 1934 and $214,600,000 for 1936 of edible and inedible products produced by the United States domestic fisheries.

513. In order to arrive at the net value of edible fish products of the United States domestic fishery, it is necessary to reduce the above amounts by the amounts of $22,609,000 for 1934, and $24,899,000 for 1936, representing the value of non edible fish products. The net edible value for 1934 is therefore $166,191,000 and for 1936 $189,701,000.

514. Edible Fishery Imports in 1934 were valued at $23,000,000 and in 1936 were valued at $30,675,000. The total approximate values therefore of market consumption of the United States Domestic Fishery, plus imports for the years 1934 and 1936 are $189,191,000 and $220,376,000 respectively, showing an increase of $31,185,000 or 16.4 per cent for 1936 over 1934 consumption value.

515. To indicate the products covering such increases the following comparative statistics for 1934 and 1936 of:—

(1) United States Domestic Production.
(2) Imports.

in certain classes of fish of most interest to Newfoundland are given:—

515. (Continued)

PRODUCTS	UNITED STATES		IMPORTS	
	1934	1936	1934	1936
Cod, Frozen Fillets	5,902,500	8,659,000	3,942,100	9,255,303
Cusk, Frozen Fillets	486,000	1,231,800	Fillets	Fillets
Haddock, Frozen Fillets	19,226,400	26,362,300	of Fish,	of Fish,
Hake, Frozen Fillets	164,500	1,865,800	n.s.p.f.	n.s.p.f.
Pollock, Frozen Fillets	3,051,400	8,648,300	n.s.p.f.	n.s.p.f.
Flounder, Frozen Fillets	458,400	756,800	n.s.p.f.	n.s.p.f.
Cod, Smoked Fillets	1,128,200	1,048,600		
Haddock, Smoked Fillets	1,320,500	355,000	1,110,600	1,830,200
Cusk, Smoked Fillets	195,900	88,000		
Hake, Smoked Fillets	33,300	78,000		
Cod, etc., Smoked Whole	.....	.....	717,200	928,300
Cod, Fresh or Frozen, Whole	125,100,000	137,100,000		
Cusk, Fresh or Frozen, Whole	6,113,000	7,556,000		
Haddcok, Fresh or Frozen, Whole	108,614,000	195,900,000	1,941,600	3,439,600
Hake, Fresh or Frozen, Whole	15,500,000	25,648,000		
Pollock, Fresh or Frozen, Whole	18,804,000	33,400,000		
Smelts, Fresh or Frozen, Whole, (Atlantic)	551,000	729,000	5,271,700	8,811,650
Cod, Green Salted	6,944,600	7,421,600	34.451,700	53,359,300
Cod, Dry Salted	1,177,500	1,970,000	6,303,500	3,152,200
Cod, Salted, Boneless	8,992,600	8,877,600	2,381.600	2,475.600
Herring, Fresh (Atlantic)	48,755,000	54,663,000	36,117.800	47,351.800
Herrinz, Frozen	.....	.....	2.070,900	2.535,200
Herring, Pickled or Salted	9,231,300	17,624,900	31,807,900	37,671,500
Scallops, Sea	4,476,000	4,430,000	867,600	2,652,600
Lobsters, Fresh	11,346,000	13,148,000	10,158,400	11,121,500

516. The most noticeable increases of both United States Domestic Production and Imports are registered in the particular species suitable for packaged fish.

517. The package food industry has gone ahead by almost sensational increases during the past two years, so much so that all concerned in the production, distribution and sale of these products are seriously concerned as to production keeping pace with the sale demand.

518. The packaged fish products produced during 1936 totalled for all species, 121,484,400 pounds to a value of 12,428,700 dollars, or an approximate unit value at the plant of 10.2 cents per pound.

519. The percentage division of this production is as follows:—

Fresh Fillets	41 per cent
Frozen Fillets	51 per cent
Fresh Steaks	1 per cent
Frozen Steaks	1 per cent
Fresh Sticks	1 per cent
Frozen Sticks	5 per cent

and of the total, cod packed amounted to 18,239,000 pounds; Haddock 41,188,000 pounds, and Rosefish 15,521,000 pounds.

520. The total at over 121 million pounds represents an increase of approximately 15 per cent over production for 1935 when, incidentally, Fresh Fillets took the larger percentage.

521. The conclusion drawn from the above picture indicates quite clearly that the sale of Frozen Package Fish is increasing appreciably and this opinion is in correct line with the views expressed as regards the trade for frozen packaged food generally.

522. Exhaustive enquiries have been made in all directions as to the effect that this new method of marketing of fish products will have on the United States domestic production.

523. The replies received from the most reputable Brokers, Fish Commission Sales Houses, Packers and Distributors are conclusive to two major points:

(1) That the larger inroads into the United States Domestic Fishery Banks is causing serious depletion of those banks.
(2) That the "all through" quality of fish landed from long trip trawlers leaves much to be desired.

524. These two opinions are serious ones for the Companies producing the packaged fish, and even the fresh fish dealers comment openly upon the subject.

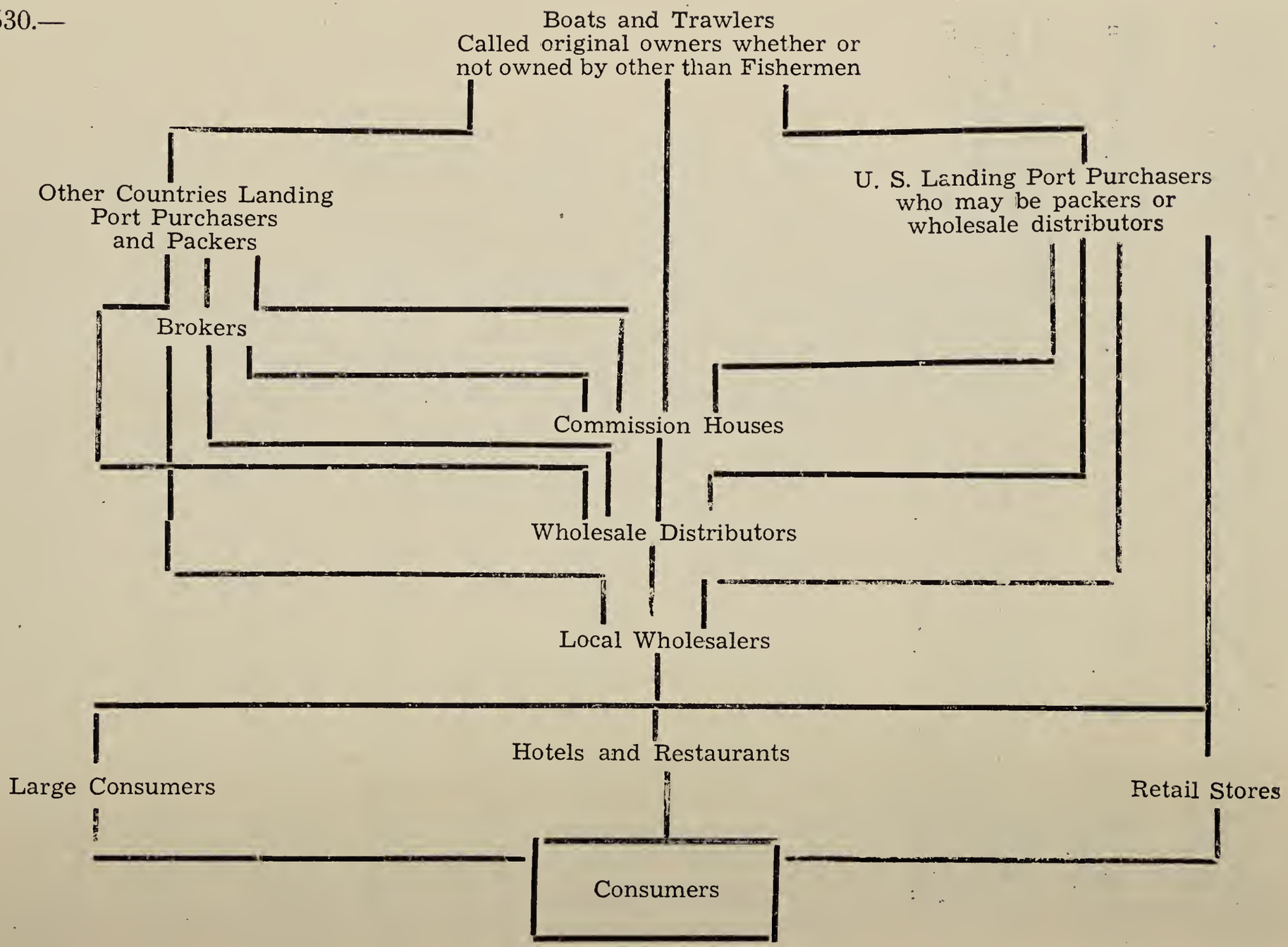
525. The action of one very large merchandising Company with over 10,000 stores, whose purchases reach the enormous quantity of approximately 25,000,000 pounds of fish annually, in going to Canada for all supplies of smoked fish, is due to the fact that they feel safer in regard to the quality of fresh fish used for smoking, is evidence in itself that the quality at the fishing port is not entirely reliable.

526. The difficulties that are emphasized above have many affecting influences and the principal operators in the United States Atlantic Domestic Fisheries are seriously concerned in regard to them.

527. To overcome these difficulties as far as they can, the four principal operators in Boston have purchased new modern equipped trawlers but all, nevertheless, realize that the question of quality is still not properly solved.

528. In addition there are of course many other trawler and fishing boat operators working out of Boston, Gloucester, Portland and other fishing ports.

529. The plan of distribution of fish and fish products in the United States is a varied one due to the fact that several of the principal handlers do not confine their activities along any one channel. The following map gives an outline of the different sections of the trade and the manner in which the products eventually find their way to the consumer.


Boats and Trawlers
Called original owners whether or not owned by other than Fishermen
Other Countries Landing Port Purchasers and Packers
U. S. Landing Port Purchasers who may be packers or wholesale distributors
Brokers
Commission Houses
Wholesale Distributors
Local Wholesalers
Hotels and Restaurants
Large Consumers
Retail Stores
Consumers

531. There is no record existing of the exact number of operators in each class but statistical records examined indicate that:—

(1) Wholesale and manufacturing establishments operating in New England and Middle Atlantic States total 788.

(2) The number of persons classified as proprietors engaged in the industry in the above mentioned States is 67.

532. There is no satisfactory record existing of the number of brokers selling fish and fish products and the enquiries made have not been conclusive enough to allow an indication to be officially recorded..

533. In all classes of the trade there are many reliable operators but before exact particulars can be known, and operators classified, a systematic survey must be undertaken. The following information, however, may be of assistance:—

(1) Large purchasers and distributors operating in the East Coast and Mid-Western States number approximately 10.

(2) Large direct purchasers and retail distributors in the same areas number approximately 15.

(3) That as regards brokers, only those whose standing has been fully investigated should be employed.

534. The fish trade is known to be one of the most difficult of trades to control and exporters desirous of obtaining satisfactory handling of their products would be well advised to study the market carefully and having decided upon the lines to be handled, divide the country into sections and appoint an exclusive agent for each. The United States is too vast a territory to expect one agent to cover all the ground effectively.

535. The question of transportation enters very largely into the scheme of things when the export of frozen products from Newfoundland to the United States is considered.

536. There is at present a weekly service between St. John's and New York, and a three weekly service between St. John's and Boston. The capacity of the cold storage space on these ships has been, according to information, sufficient for all practical purposes but it would seem that any appreciable increase in the production of frozen products in Newfoundfoundland would be subject to serious delays in shipment.

537. Furthermore there are no carrying lines providing cold storage facilities for transport of frozen products from any other part of Newfoundland direct to the United States, neither is there any coastwise service available to enable produce to be transported in good condition to St. John's for further transhipment.

538. It is known that the government and certain firms in Newfoundland own refrigerated ships, but the carrying capacity of these vessels whilst serving the present production well, will be hardly sufficient should there by any major development of the frozen fish industry in Newfoundland.

539. These vessels could, however, maintains a satisfactory service whilst such an industry is being built up because whatever port they put into in the United States, ample cold storage is available to enable a quick turn round to be made.

540. The cold storage companies and railroad and trucking Companies have increased considerably the holding and transportation facilities for frozen products.

541. There are few cities of importance in the United States where cold storage facilities are not available. The Railroad Companies continue to build more refrigerated cars every year and in addition many of the large food packing houses have had cars constructed for their own use. It can be said that there is a daily refrigerated car service on all railroads from the large packing centres.

542. In addition to the railroad services there are several companies operating refrigerated truck services to the majority of important towns. These services operate from various base towns and trucks from the Atlantic Coast go as far West as Chicago.

543. The following tables gives the present Railroad refrigeration charges from New York to some of the principal cities.

FROZEN FISH

Railroad and Refrigeration Charges from New York To:

	Min. 20,000 *lbs.*	*Min.* 15,000 *lbs.*	*Less Than Carload*
Chicago	.84c. cwt.	$1.06 cwt.	$1.52 cwt.
Philadelphia	.31c. cwt.	.39 cwt.	.56 cwt.
Baltimore	.41c. cwt.	.53 cwt.	.75 cwt.
Pittsburgh	.57c. cwt.	.73 cwt.	1.04 cwt.
Cleveland	.64c. cwt.	.81 cwt.	1.16 cwt.
Detroit	.68c. cwt.	.86 cwt.	1.23 cwt.
Buffalo	.54c. cwt.	.69 cwt.	.99 cwt.
St. Louis	.92c. cwt.	1.17 cwt.	1.67 cwt.
Kansas City	$1.24 cwt.	.....	2.25 cwt.

Refrigeration:—$4.00 per ton ice

.75c. per cwt. Salt.

545. It will be seen from the foregoing that the efforts of each section of the industry are working towards increasing sales of frozen fish products and it is, therefore, apparent that, if the question of quality is to be seriously thought out, some move towards establishing plants nearer to the fishing zones must be contemplated.

546. The opinion gathered from the principal frozen packaged food distributors, and their wholesale and retail outlets, is that the main attraction to the housewife is the quality of the product offered. It will serve no purpose here to enumerate the difficulties attendant upon the marketing of frozen products, but all handlers admit that a lowering of the quality of

any product will have the effect of considerably curtailing sales of other products.

547. Fortunately, up to the present no mushroom companies have been established in this trade and for the moment the field is held by two companies of excellent standing..

548. There are other large companies considering the policy of entering into the trade but as yet, beyond smaller companies distributing fruit and vegetable products only, no move of importance has been made.

549. The two companies referred to in paragraph 547, whilst operating in the same field, cannot be said to have the same production policies. The larger of the two companies, the pioneer of the industry, is, together with its wholly owned subsidiary companies, one of the largest food organizations in the United States. The policy of this company is to produce every article bearing its branded trade name under the direct supervision of its own people.

550. The second company whose entry into the frosted package industry is comparatively recent, feel that until the business has firmly established itself by wide public acceptance, their requirements can be best served by long term minimum quantity agreements with the already established producers in each of their respective classe of merchandise.

551. Information received points to a similar policy being considered by the other companies studying the possibilities of entering the trade.

552. Conversations with the distributors and principal wholesale outlets for frozen packaged food products, point to the enormous field yet to be canvassed.

553. Conservative estimates put the number of stores in the United States available for handling frozen packaged food products at 300,000. The volume of business which each store is expected to do for the first year is $1,500. The volume which is expected to be attained after 3 years trading is $4,000 per store per annum, or a total of 1,200,000,000 (one billion two hundred million) dollars, if all such stores are euipped.

554. The sale of frozen packaged food products is supported to-day mostly by sales aid literature with a small amount of local newspaper advertising, but information received is that this is to be greatly intensified in the near future by a wide national scheme, as the products are now considered to be ready for national advertising.

555. The force of this new method of merchandising is making itself felt on the centres which are at the moment,, chief distribution points in their respective zones. Observers point out that whilst these centres have done the best they could, the distribution of fish products has not been sufficiently wide to carry them to some of the remote towns. With the adoption of the frosted fish package, this deficiency is being overcome and in addition, certain of the larger distributors in Chicago expressed the view that even the dealers in towns that have been efficiently served, now find it more convenient to order their requirements direct from the packing plants.

The opinion given as a result of this view is that the large national fish operators and distributors must take steps to establish themselves in these towns. With this movement, the establishment of distributing cold storage facilities will follow and carry with it the message of the frozen package, closely assisted by direct representation of the frozen package food corporations.

556. The distribution of Atlantic frozen fish products has been gaining ground during the past year and covers a wide area. The information gathered indicates that for practical purposes an imaginary line drawn from the boundary of the State of Minnesota with Canada to the boundary of the State of Kansas with the State of Oklahoma in the South and from Kansas to the State of North Carolina in the East, provides the area over which Atlantic frozen fish products are said to be distributed. This area covers the following States to which is appended the total of the approximate population of each State.

New York	12,588,000
Pennsylvania	9,632,000
Illinois	7,631,000
Ohio	6,647,000
Michigan	4,843,000
Massachusetts	4,250,000
New Jersey	4,042,000
Missouri	3,630,000
Indiana	3,238,000
Wisconsin	2,939,000
Kentucky	2,615,000
Minnesota	2,564,000
Iowa	2,471,000
Virginia	2,422,000
Kansas	1,881,000
West Virginia	1,730,000
Maryland	1,632,000
Connecticut	1,607,000
Maine	798,000
Rhode Island	688,000
District of Columbia	487,000
New Hampshire	466,000
Vermont	359,600
Delaware	238,000

557. It must not be interpreted that the market which this area offers has by any means been efficiently covered and that it is only necessary to offer the frozen products and they will be sold. That this is not the case, is the lesson provided last year, when in view of considerable increase in the sales of frozen fish for 1935 over 1934, United States packers anticipating an increased consumption during 1936, produced a much larger supply

of frozen fish. Due to a very mild 1936-7 winter, fresh fish was available in large quantities and at relatively cheap prices, and therefore fresh frozen products were preferred to the stock packed during the earlier months. This left large inventories in the hands of all packers and it was eventually necessary for the United States Federal Government to step in and purchase a considerable quantity of the frozen fish for relief distribution, in order to prevent the intake prices of freshly caught fish from sinking to a disastrously low level.

558. With this lesson in their minds, the packers are to-day moving more methodically along the lines of basic and gradual development, realizing that to carry the message of the frozen package food, extensive press publicity as well as national advertising campaigns, are necessary.

559. The members of the medical and other scientific professions have lent, and are still lending their voices in this press publicity campaign. Public Health and Welfare superintendents talk and write almost daily in regard to the better food obtainable in the frozen package, and there is little doubt in the minds of all packers that the market will grow to absorb the quantities that have have been estimated as possible to sell.

560. Reviewing the circumstances in relation to the supply of the raw fish product, together with the plans of the frosted or frozen food packers and the market consumption possibilities, it is obvious that the United States fishery market holds increasing opportunities for the imports of fish from other countries. It is, therefore, not unreasonable to suppose that in Newfoundland, with its stated sources of unlimited supplies of all commercially used species of fish, a production centre of immense value to the United States frozen fish package producers exists.

561. That the Newfoundland sources of supply are important has been already acknowledged and to the United States firms operating in the industry these sources are made more attractive due to the privileges that are accorded to American citizens under the Treaty of 1818 between Great Britain and the United States, covering certain areas on the southwest and west coasts of Newfoundland. A full description of this Treaty and its present interpretation by the United States Treasury is given earlier in this report, Paragraphs 14 and 15.

562. The following schedules in regard to packages and packaged fish are attached:—

(1) Types of packages used in the United States. No. 44.
(2) Descriptions of packaged fish. No. 45.
(3) Methods of packaging fish. No. 46.

SCHEDULE OF PACKAGES

No. 44

Description of Package	*Index No. of package*
100 pound Wooden Box	1
50 pound Wooden Box	2
30 pound Wooden Box	3
20 pound Wooden Box	4
15 pound Wooden Box	5
10 pound Wooden Box	6
20 pound Tin Box Fish individually wrapped. Packed in ice	7
20 pound Wooden Box. Fish individually wrapped	8
10 pound Tin Box. Fish individually wrapped, packed in ice	9
10 pound cartons. Fish individually wrapped. 2 cartons to a case	10
5 pound cartons. Fish individually wrapped. 4 cartons to a case	11
1 pound cartons lined. 12 or 24 cartons to a case	12
½ pound cartons lined. 12 cartons to a case	13
1 pound Wooden boxes lined. 12 or 24 boxes to a case	14
2 pound wooden boxes lined. 12 boxes to a case	15
3 pound wooden boxes lined. 12 boxes to a case	16
5 pound wooden boxes lined. 12 boxes to a case	17
300 pound barrels	18
200 pound barrels	19
100 pound barrels	20
50 pound Tubs	21
100 fish count to a box	22
50 fish count to a box	23
25 fish count to a box	24
1 pound cans 14 oz. net. Packed in 12, 24 and 48 cans to a case	25
12, 10, 8, 7 and 6 oz. cans. Packed in 12, 24 and 48 cans to a case	26
4 oz. wrapped package. 20 packages to a carton	27

Schedule No. 44 continued

Article	*Index No. of package*
Fresh Fish	1. 2.
Frozen Fish. Whole	1. 2. 4. 5. 6.
Fresh Fillets	7. 9.
Frozen Fish Fillets and Steaks	4. 5. 6. 8. 10. 11. 12.
Salt Fish. Whole	1. 2.
Salt Fish. Strips	2. 3. 4. 5.
Salt Fish, Boneless Fillets	4. 6. 12. 13. 14. 15. 16. 17.
Salt Fish. Dressed	2. 3. 4.
Salt Fish Flakes	26.
Pickled Fish. Whole	18. 19. 20. 21.
Pickled Fish. Fillets	19. 20. 21.
Smoked Fish. Whole	4. 5. 6. 22. 23. 24.
Smoked Fish. Fillets	4. 5. 6.
Smoked Fish. Kippers	4. 11.
Smoked Fish. Boneless	26. 27.
Fresh Fish. Canned	25.
Salt Fish. Canned	25. 26.
Fish Cakes. Canned	26.
Scallops. Frozen	12.
Clams. Frozen	12.
Clams. Fresh	18. 19.
Lobster Meat. Frozen	12.

DESCRIPTION OF PACKAGED FISH

SCHEDULE NO. 45

Fresh Fish are Fish

(1) As they come from the water.
(2) With head on and viscera removed.
(3) With head and viscera removed.

Dressed Fish Frozen are:

(1) Fish wholesaler package with head and viscera removed.
(2) Consumer package with head, tail, fins, nape, scales and viscera removed.

Fillets of fish are

(1) Side Strips of solid meat with napes and tails cut and skin on.
(2) Side strips of solid meat without back skin, and with napes and tails removed.

Steaks are

(1) Thick slices cut from the centre of the fish.

Salt Fish whole are

(1) Fish, split with head off and sound bone removed.

Salt Fish Strips are

(1) Sides of fish with napes trimmed and all large bones removed.
(2) Side of fish with nape trimmed and all bones removed.

Salt Fish Boneless Fillets are

(1) Centre fillets of fish with all bones and skin removed.

Salt Fish Dressed are

(1) Fish with tails, napes and fins removed.

Salt Fish Flakes are

(1) Pieces of fish put through a mincer and then dried to a flaky powder form.

Pickled Fish whole are

(1) Fish with heads on, viscera removed.
(2) With heads and viscera removed.
(3) Sides of fish only.

Pickled Fish Fillets are

(1) The trimmed sides of fish with back skin on.

Smoked Fish whole are

(1) Fish with heads on and viscera removed.
(2) With heads, fins and viscera removed.

Smoked Fish Fillets are

(1) The sides of fish only.

Smoked Fish Kippers are

(1) Fish with heads on, split and opened.
(2) Fish with heads off, split and opened.

Smoked Fish, Boneless are

(1) Fish split with heads off, tails trimmed and all bones removed.

Canned Fish Whole are

(1) Fish with heads off, scales and part of tail removed.

Salt Fish Canned are

(1) Fish split with heads off, tails trimmed and scales removed.

Fish Cakes Canned, are

(1) Fish mixed with other ingredients.

Scallops frozen are

(1) The scallop muscles only.

Clams Frozen are

(1) The clam meat only

Lobster Meat Frozen is

(1) The Lobster Meat only.

METHODS OF PACKAGING FISH SCHEDULE No. 46

The following is a description of the weight of fish, wrappings and packages used:—

Cod Fillets Skinless Frozen

Average weight ¾ to 1¼ lbs. Individually wrapped. Packed 5 and 10 lbs. to a carton.

Cod Steaks Frozen

Average weight 1 lb., ½ inch thick. Individually wrapped. Packed 5 and 10 lbs. to a carton.

Haddock Pan dressed, Frozen

Average weight 2¼ lbs. Individually wrapped. Packed 10 lb. cartons.

Haddock, Fillets Frozen

Average weight ¾ lb. Individually wrapped. Packed 5 and 10 lb. cartons.

Haddock Fillets—Twin Frozen

Average weight ½lb. Two fillets wrapped. Packed 5 and 10 lb. cartons.

Flounder Fillets, Skinless Frozen

Average weight, 6 fillets to 1 lb. Wrapped 4 fillets together. Packed 5 and 10 lb. cartons.

Mackerel Fillets Frozen

Average weight, 2 to 3 fillets to 1 lb. Wrapped 2 fillets together. Packed 5 and 10 lb. cartons.

Swordfish Steaks Frozen

Average weight, ¾ lb. ½ inch thick. Individually wrapped. Packed 5 and 10 lb. cartons.

Salmon Steaks Frozen

Average weight, ½ lb. Individually wrapped. Packed 5 and 10 lb. cartonss.

Halibut Fillets Frozen

Average weight ¾ lb. Individually wrapped. Packed 5 and 10 lb. cartons.

Halibut Steaks Frozen

Average weight ¾ lb. ¾ inch thick. Individually wrapped. Packed 5 and 10 lb. cartons.

Fillets of Fish, Skinless Frozen

Average weight ¾ lb. Individually wrapped. Packed 5 and 10 lb. cartons.

Scallops, Frozen

Packed loose in lined 1, 5 and 10 lb. cartons.

Clams, Frozen

Packed loose in lined 1, 5 and 10 lb. Cartons.

Lobster Meat Frozen

Packed loose in lined 1 lb. cartons.

Wrapping used is either Parchment or Cellophane paper.
Cartons used are waxed.
Where not mentioned, Fillets are with skin on.

RELATIVE WEIGHTS FILLETS OF FISH TO WHOLE FISH

Species	*Lb.*	*Fillets*	*Equals*	*Lb.*	*Whole Fish*
Cod	1	"	"	2½	"
Cod Steak	1	"	"	3	"
Catfish	1	"	"	3	"
Cusk	1	"	"	2½	"
Flounder	1	"	"	4	"
Haddock	1	"	"	2½	"
Hake	1	"	"	2½	"
Halibut	1	"	"	2½	"
Mackerel	1	"	"	2½	"
Ocean Perch	1	"	"	4	"
Pollock	1	"	"	2½	"
Salmon Steak	1	"	"	2	"
Swordfish	1	"	"	2	"
Whiting	1	"	"	3	"

PART XII

CONCLUSIONS AND RECOMMENDATIONS

563. The strength of a report rests principally upon the positive nature of the conclusions arrived at. These conclusions must of course find their basis in strict accordance with the picture presented jointly by statistical data and other information collected.

564. As a result of a careful review of the data and information given in the preceding paragraphs of this report there is little doubt that the following conclusions can be drawn:—

(1) That in general, imports of fish and fish products into the United States of America are more supplemental to—rather than competitive with the production of the United States Domestic Fisheries.
(2) That, the participation of Newfoundland products in the United States market is small.
(3) That, the main sources of competition to products from Newfoundland entering the United States, are,
    (a) The Canadian Fisheries.
    (b) The lack of Newfoundland production.
    (c) The United States Customs tariff.
(4) That the recent development of the frozen food package trade in the United States is widening the distribution of of fish with consequent increase in consumption.
(5) That in view of the decreasing supplies from the adjacent American fishing banks, the United States producers of frozen packaged fish and others are considerably concerned in regard to maintenance of quality.
(6) That in view of the stated unlimited source of supplies of commercial fish species surrounding the Newfoundland coast, and the freedom of operation permitted along certain sections of the coast, Newfoundland holds a privileged position for the United States producers.

565. Therefore, from the foregoing conclusions, the principal question resulting therefrom for study is:—

"What can be done to enable Newfoundland products to enter the United States on a larger scale."

566. The fact that imports generally can be considered as supplemental to, rather than totally competitive with products of the United States domestic fisheries, is a point highly in favour of increasing imports from a nearby source, such as Newfoundland.

567. In a study of this nature, it is obviously necessary to analyze the present position in respect of such trade already accomplished.

568. The statistics detailed earlier in this report, Paragraph No. 273 show that in the list of United States fishery imports Newfoundland exports for 1936 take fourth place as regards quantity, and last place as regards unit value. This demonstrates that Newfoundland's exports are of the cheaper grades of fish and fish products.

569. A knowledge of the production position in Newfoundland will reveal the fact that "real" fishery production does not exist. It should not be immediately interpreted that the impression to be conveyed is that production is entirely negligible and that no equipment exists, but, if the question of fishery production is looked at from the angle of the abundance of fish said to be available and what equipment is necessary for such a production, it will be readily admitted that Newfoundland lags far behind all the fishery producing countries.

570. The trade now being accomplished is largely confined to Salt Codfish with Herring, Salmon, Lobster, Smelts, etc., following in moderate quantities. Exports of Salt Codfish to the United States (including Porto Rico) are responsible for placing Newfoundland in fourth place in the list of quantity fishery imports into the United States.

571. To summarize therefore the positions as regards present trading it has to be recognized that:—

(1) That Newfoundland has little "real" fishery production outside salt codfish.
(2) That Newfoundland does not possess sufficient equipment to conduct large scale fishery operations.

572. Studying the conditions existing in the United States Market to-day it is shown that many of the previous difficulties have disappeared, but in their places have appeared others which demand much more from the producers in the way of production equipment and distribution set up, to enable them to cater for a more modern and higher scale of living. These conditions face Newfoundland with very serious problems if any change is to be made from the present standard of production to that embracing products in the higher price levels.

573. The necessity to raise the standard in Newfoundland has often been quoted and if this could be accomplished simply by the acquisition of production equipment, a suggestion to that end might be put forward. Unfortunately, however, other elements enter as largely into the scheme of things and are as equally important.

574. Enquiry in the United States as to what are the best fishing methods, the best production methods and packaging methods, demonstrates that a production organization experienced in every branch of the industry is required. Furthermore, ready sales and distribution channels are necessary, for if they are not immediately available it will take considerable time and money to develop sales into quantities sufficiently large to make Newfoundland production competitive with that of other producers.

575. Taking into consideration therefore the present production position in Newfoundland together with the requirements demanded by a change in standards of production, it seems in the final analysis that the only effective means for immediately permitting Newfoundland to improve those standards and participate to a greater degree in the United States market is to:—

(1) Supply Primary Products.
(2) Attract United States Producers to Newfoundland.
(3) Secure reductions in rates of import duties.

576. The question that covers Analysis No. 1 is actually:—

"The supply of the treated product for further processing by the United States Domestic Industries."

and refers principally to "Green or Wet Salted Codfish."

577. It must be admitted that for many years to come, the greater percentage of Newfoundland fishermen will have to look to the salt cod fishery for their means of livelihood.

The report of the Commission of Enquiry into the Salt Codfish Industry issued in 1937, emphasized the many channels through which fish had to pass in order to reach the exporter who originally financed the venture. This report also drew attention to the difference in cures of fish from various parts of Newfoundland and to the difficulties involved in the setting up of standards for culling fish. It would seem therefore that if an appreciable portion of the salt codfish production could be marketed in a green or wet salted state advantageous steps towards an improvement in the salt cod fishery would have been made.

578. The Companies operating in the United States domestic salt codfish industries are mainly concerned with receiving the primary product, i.e., the "Green or Wet Salted Fish" as cheaply as possible. The production of this primary product by the United States domestic fisheries is not very important and statistics indicate the very large quantities imported.

579. The result of a cheapening of a primary product is well known and there is little doubt that the influence in this case will be identical. It must not be forgotten that as time goes on the people now resident in the United States and consumers of salt codfish as Newfoundland produces it, will pass along leaving a younger generation brought up with a liking for the product but in the modern way "all prepared for use."

580. The United States domestic industries have achieved appreciable success in introducing the various salt codfish prepared products which are now regular lines on the shelves of a considerable number of fish and grocery stores in the country.

581. It would seem therefore that if a reduction in tariff rates for this primary product for the United States domestic industries could be obtained, both the supplying trade of Newfoundland and the processing industries of the United States would benefit. The increase in supplies will have no detrimental effect whatever on the United States domestic production of green salted codfish as the production in 1936 only reached a total of 7,422,000 pounds as compared with an importation of 52,360,000 pounds.

582. Passing on to Analysis No. 2, paragraph 575, "To attract United States Producers to Newfoundland," reference should be made to the interpretation of the Treaty of 1818 between His Britannic Majesty and the United States of America by the United States Treasury paragraphs 14 and 15 of this report.

583. It is remarkable to note that, in spite of the wide interpretation of the American rights on the Treaty Coast of Newfoundland, the fishery possibilities have not been exploited by the American producers. The answer given is that in the past practically all the domestic market requirements

were found nearer at hand but to-day conditions demand that the extension to further fields must be considered.

584. In paragraph 523 the opinions held by the leading American producers in regard to quality of fish landed by long distance trawlers and other boats have been cited. The view expressed by all is that some immediate steps must be taken if the quality demanded by the frozen packaged fish distributors is to be maintained. All channels of the frosted package food trade realize that at this stage a falling down in the quality of any one product will do incalculable harm to the industry as a whole. There is therefore definite attraction for the United States producers to organize production on the Treaty Coast of Newfoundland.

585. From the enquiries made, the Companies who are in a position to take up the question of production on the Newfoundland Treaty Coast are not many but, on the other hand the number of producing and distributing firms who could purchase Newfoundland products is much larger.

586. Of the Companies referred to in the first part of the preceding paragraph, three of them have stated their willingness to send representatives to Newfoundland to investigate the possibilities of establishing production plants on the Treaty Coast.

587. It must be readily admitted that the advent of these Companies to Newfoundland will accomplish far more in a shorter space of time to increase Newfoundland participation in the American market than will any activities of the local Newfoundland Companies working entirely on their own resources.

588. Conversations with some of the executives of these American Companies indicate that privileges might be sought from the Government of Newfoundland but, on the other hand, expressions have also been made stating the view "that all Companies willing to operate should start off on an equal basis." Nevertheless an agreement with responsibilities is essential, because, if none were made, the matter would be left so open that when production on the American fishing banks again became prolific, the Companies could withdraw their support.

589. The Status of the three Companies indicated in Paragraph 588 as being interested in the establishment of production plants on the Treaty Coast can be classified as follows:—

> Only one company covers all branches of the industry. This Company owns the trawlers and freezing plants. Packs exclusively under their own trade name and distributes the products direct to wholesale and retail establishments.
>
> The other two Companies own trawlers and freezing plants but pack the products for their own distribution as well as for other large distributors in various parts of the country.

590. Whilst it would appear advantageous to have these Companies operate on the Coast, the fact that there are many other importing and dis-

tributing firms cannot be overlooked. The adoption of any agreement with any one of the Companies previously indicated will have certain reaction upon the other United States domestic producers. The force of this reaction will naturally depend upon the scope of the advantages that have been granted to Companies establishing plants on the Treaty Coast.

591. When examining the Import Statistics it will be seen that in spite of increases in Tariff rates, fish products imported from Japan continue to increase. The wide difference in costs of production between Japan and the United States was recently the subject of an official enquiry and as a result the import rate on Frozen Swordfish was increased. The labour conditions in Japan are primarily responsible for the difference in costs, and enquiries point to the possibility that any action that may assist in diminishing imports of lower priced products will receive consideration.

592. Joining the above points of view together with the thought that any advantage extended to firms financially able to establish plants on the Treaty Coast will react unfavourably upon the other United States producers unable to do so, a case can be made out to the authorities that:—

> "On all fish products certified as being wholly produced on the American Treaty Coast of Newfoundland imported into the United States should be subject to a preferential rate of duty."

593. From another point of view, Newfoundland, in relation to the United States rights on the Coast, can be considered as extending preferential treatment to citizens of the United States and for purposes of imports into the United States, products produced on that coast, might be considered on the same basis as is applied to imports from Cuba.

594. If such a revision proposed above could be arranged, it would place the smaller American producers and receivers within reasonable range of price level of the United States producers established on the Treaty Coast, and in addition would materially assist the local Newfoundland producers.

595. The influences resulting from the attraction of the large United States Producers and the possibility through revision of duties, of the increased export of primary and packaged products should call into being a valuable adjacent industry, the packing paper and carton industry. Enquiries have been made in regard to this and large mills visited. Conversations with responsible people in this industry indicate that they will be willing to investigate the matter fully. The information required for their study is:

(1) Will the Government permit entry of machinery free of duty.
(2) For what period of years would the Government consider protecting the industry.

RECOMMENDATIONS

596. Proceeding, therefore, from the conclusions arrived at and described in Paragraphs 563 to 594 the following recommendations are respectfully submitted to the Commission of Government, in the firm belief that these recommendations provide the best means whereby Newfoundland can attain a larger percentage of the United States fishery import market.

Although the recommendations put forward include a case for modification in the United States present rates of import duties, they do not carry with them any serious disadvanage to the United States domestic fisheries.

Therefore, by reason of the fact that:—

(1) The production of green or wet salted codfish by the United States Domestic Fisheries is small and that the greater percentage of this primary product has to be imported, it is suggested, in order to encourage further extension of the United States Processing Industries in Salt Codfish and other products that:—

The rate of import duty on green or wet salted codfish containing more than 45 per cent moisture by weight be modified and fixed at:—

1 (a) ¼ (one quarter) cent per pound.

1 (b) Free of import duty when certified as being wholly produced on the Treaty Coast of Newfoundland.

(2) Fish and Fish products from the Treaty Coast of Newfoundland are considered to be duty free products, if taken by, or under the supervision of an American vessel whether or not by American citizens or foreigners; and, that, due to economic conditions many American producers are unable to take advantage of the valuable fishing grounds off the Newfoundland Coast made available to them under the Treaty of 1818 between the United States of America and Great Britain and thereby are prejudiced and prevented from meeting competition from countries with lower standards and labour conditions, it is suggested that:—

2(a) The rate of import duty on fish and fish products except green or wet salted Codfish, certified as being wholly produced on the Treaty Coast be fixed at the rate of 1 cent per pound.

It is publicly known that conversations are now proceeding between the British and American Governments in order to arrive at a basis for a trade agreement between the two countries.

The questions appertaining to Newfoundland are being taken care of by the British Embassy in Washington, and it is suggested that the two recommendations set forth above be considered as early as possible so as to enable the Commercial Counsellor of the Embassy to include them in his discussions.

(3) Due to the many existing obstacles, it is extremely difficult for local Newfoundland producers, working upon their own resources, to secure any large part of the United States fishery market, and it is suggested that:—

3 (a) The Commission of Government should invite the more important United States Fish Production firms to send representatives to St. John's to investigate the possibilities of undertaking fishery production on the Treaty Coast of Newfoundland. That in the event of one or more firms being willing to undertake such production, their activities should be subject to an agreement in which the best interests of the country are served.

(4) Due to the fact that there are many smaller but worthwhile producers and distributors of fish and fish products in the United States, it is suggested that:—

4 (a) The Commission of Government should do everything in their power to assist the local producers in Newfoundland to develop trade in the United States, and further:—

4 (b) Open a Trade Office in the United States, preferably at a leading distribution point such as New York, Boston or Chicago, from which active and effective contacts can be made on behalf of Newfoundland producers. Such office should be properly located so as to provide room for a permanent display of Newfoundland products. It is suggested that the office be adequately directed and staffed, and funds provided so that the ground can be efficiently and continually covered and developed.

4 (c) That the Commission of Government should consider the policy of attending at the various exhibitions of standing both Federal and State, so as to more amply display the products that Newfoundland has to offer.

597. All of which is respectfully submitted.

J. MAURICE.

New York, December 31, 1937.

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DEPARTMENT GEOGRAPHY

ECONOMIC BULLETINS

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No. 2. The Marketing of Fishery Products in Newfoundland, *by Henry King*, 1937.

No. 3. Report of the Commission of Enquiry Investigating the Sea Fisheries of Newfoundland and Labrador, 1937.

No. 4. Report of Fisheries Research Committee, 1937.